



ACADEMIC INFORMATION

Degree Information

Academic Foundations and Core Curriculum

Pre-Professional Curricula

Applicability of Catalog Regulations

DEGREE INFORMATION

UNDERGRADUATE DEGREES

ASSOCIATE DEGREE

Associate of Applied Science in Radiography
Major in radiography

BACCALAUREATE DEGREES

Bachelor of Applied Arts and Sciences
Major in applied arts and sciences

Bachelor of Arts
Majors offered in art, computer science, English, history, humanities, international studies, kinesiology, mass communication, mathematics, music, political science, psychology, sociology, Spanish, and sport and leisure studies

Bachelor of Business Administration
Majors offered in accounting, economics, finance, general business, management, management information systems, and marketing

Bachelor of Fine Arts
Majors offered in art and theatre

Bachelor of Music
Majors offered in music (performance) and music (certification)

Bachelor of Science
Majors offered in biology, chemistry, computer science, geosciences, kinesiology, mathematics, physics, psychology, sociology, and sport and leisure studies

Bachelor of Science in Athletic Training
Major in athletic training

Bachelor of Science in Clinical Laboratory Science
Major in clinical laboratory science

Bachelor of Science in Criminal Justice
Major in criminal justice

Bachelor of Science in Dental Hygiene
Major in dental hygiene

Bachelor of Science in Exercise Physiology
Major in exercise physiology

Bachelor of Science in Interdisciplinary Studies
Major in interdisciplinary studies with certification program in elementary teaching: early childhood - grade 6, and grade 4 - grade 8

Bachelor of Science in Mechanical Engineering
Major in mechanical engineering

Bachelor of Science in Nursing
Major in nursing

Bachelor of Science in Radiologic Sciences
Major in radiologic sciences

Bachelor of Science in Respiratory Care
Major in respiratory care

Bachelor of Social Work
Major in social work

GENERAL REQUIREMENTS FOR ASSOCIATE OF APPLIED SCIENCE IN RADIOGRAPHY

1. Satisfy all admission conditions.
2. Complete a minimum of twenty-five percent of the semester hours required in the specific degree program at Midwestern State University. Credit by examination may not be used to satisfy the minimum residence requirements.
3. Complete, in residence at Midwestern State University, 12 of the last 15 semester hours required for the degree.
4. Complete a minimum of 6 semester hours of the major in residence at Midwestern State University.
5. Count not more than 15 semester hours in extension and correspondence toward a degree. Credit by correspondence for a course failed in residence will not be accepted toward graduation.
6. Earn a minimum grade point average of 2.0 on the courses attempted at Midwestern State University. A student must also earn a minimum grade point average of 2.0 in the major. A student must have a C (2.0) major and cumulative average based on Midwestern State University work, as well as transfer work accepted, to graduate. A student who presented a grade point deficiency based on transfer work accepted must have sufficient grade points earned at MSU to remove the deficiency in the major and cumulative average. See program area for special grade requirements.
7. Complete 26 semester hours of general academic courses listed on page 249 in the Radiologic Sciences section of this catalog.
8. Have a minimum total credit of 72 semester hours excluding developmental courses.
9. Complete all requirements specified for the degree by the college in which it is offered.
10. Meet all requirements of the Texas Success Initiative (see page 67).
11. Apply formally for the degree through the Office of the Registrar. See Academic Calendar for deadlines and see Application for Degree Candidacy.
12. Pay all fees and satisfy all other financial obligations including “exit interviews” as required by loan programs.
13. For May and December graduates, attend graduation exercises unless approved by the Provost for graduation in absentia.

GENERAL REQUIREMENTS FOR ALL BACHELOR’S DEGREES

1. Satisfy all admission conditions.
2. Complete a minimum of twenty-five percent of the semester hours required in the specific degree program at Midwestern State University. Credit by examination may not be used to satisfy the minimum residence requirements.
3. Complete, in residence at Midwestern State University, 24 hours of the last 30 semester hours required for graduation with the exception of the BAAS and distance education programs in health sciences: BSRC, RN/BSN, and BSRS.
4. Take no more than 18 semester hours by correspondence. Credit by correspondence for a course failed in residence will not be accepted toward graduation.
5. Complete a major of at least 24 semester hours of which 12 must be advanced; 12 advanced semester hours of the major must be completed in residence at Midwestern State University. This requirement does not apply to the BAAS degree.

6. Complete, if required by the program or selected by the student, a minor of at least 18 semester hours of which six must be advanced. Six advanced semester hours of the minor must be completed in residence at Midwestern State University. This residence requirement does not apply to students receiving the BAAS degree with a minor.
7. Earn a minimum grade point average of 2.0 on the courses attempted at Midwestern State University. A student must also earn a minimum grade point average of 2.0 in the major and a 2.0 in the minor. A student must have a C (2.0) major, minor, and cumulative grade point average based on Midwestern State University work, as well as transfer work accepted, to graduate. A student who presented a grade point deficiency based on transfer work accepted must have sufficient grade points earned at MSU to remove the deficiency in the major, minor, or cumulative average. Some programs require more than a 2.0 grade point average on major and minor hours. The student should consult with the academic advisor about specific program requirements.
8. Complete a minimum of 42 semester hours of advanced work for the BBA, BSCJ, BSME, and BSW; 39 semester hours of advanced work for the BA, BFA, BM, and BSIS; 36 semester hours of advanced work for the BAAS, BSDH, BSRS, BSCL; 33 semester hours of advanced work for the BS, BSAT, BSEP, and BSN; and 30 semester hours of advanced work for the BSRC and RN/BSN degrees.
9. Have a minimum total credit of 120 semester hours. Developmental courses are excluded from the 120 hours. Only two physical activities courses will be counted for the 120 hour requirement.
10. Core testing to assess students' knowledge of academic foundations is used as an assessment measure for accreditation; there is no passing or failing score.
11. Satisfy the Writing Proficiency Requirement through one of the following options:
 - a. Pass the Writing Proficiency Examination administered between 60 and 90 semester hours. The test, taken after the completion of English 1113 and 1123, consists of a 300-500 word essay written on one of several topics, and passage requires competency in each of three areas: (1) organization and development, (2) clarity, and (3) mechanics. Students failing the Writing Proficiency Examination must pass English 2113.
 - b. Pass English 2113, English Composition Skills. (See description of English 2113 on page 280.)
12. Complete academic foundations.
13. Demonstrate computer literacy by earning credit for a proficiency test or in CMPS 1013, 1023, 1033, 1044, EDUC 1023, or MIS 2003.
14. Satisfy all requirements specified for the degree by the college in which it is offered.
15. To graduate with honors, complete at least 30 semester hours of work at Midwestern State University with cumulative grade point average as indicated:

Cum laude	Midwestern State University cumulative grade point averages of 3.50-3.69 inclusive.
Magna cum laude	Midwestern State University cumulative grade point averages of 3.70-3.89 inclusive.
Summa cum laude	Midwestern State University cumulative grade point averages of 3.90-4.00 inclusive.

This recognition is placed on both the permanent academic record and on the diploma. Credit by examination may not be used for honors awarded at graduation. (See page 58)
16. Apply formally for the degree through the Office of the Registrar. See Academic Calendar and Application for Degree Candidacy.

17. Pay all fees and satisfy all other financial obligations including “exit interviews” as required by loan programs.
18. For May and December graduates, attend graduation exercises unless approved by the Provost for graduation in absentia.

ACADEMIC FOUNDATIONS AND CORE CURRICULUM

To achieve the goals of academic foundations the faculty of Midwestern State University has developed a core curriculum for all baccalaureate degrees, which each student is expected to complete well before beginning academic specialization. The following objectives underlie the design of the core curriculum.

1. The curriculum is designed to provide each student a range of knowledge, skills, and intellectual approaches that will support his/her efforts to develop a full and productive life. To meet this objective the University offers a course of study that contributes to the development of a meaningful career and to the continued growth of the student both as an individual and as a rational and ethical member of society.
2. First, the curriculum emphasizes the acquisition of fundamental skills--skills necessary for learning, judgment, and self-expression. Chief among these are reading, analytical and critical thinking, cogent oral and written expression, computation, and quantitative reasoning.
3. Second, the curriculum seeks to develop each student’s understanding of him/herself in relation to others through a study of the liberal arts and sciences. Such study provides exposure to the collective knowledge and experience of mankind; each student learns to gather, organize, and communicate this knowledge and experience in relationships to the cultural, social, and physical environment.
4. In the aggregate, the core curriculum provides a substantial base for the second phase of university education; academic specialization to achieve significant mastery in at least one discipline or interdisciplinary field. The core curriculum not only introduces students to a variety of disciplines (and thus to related career options), but more importantly provides a perspective from which to view specialized study in relation to the whole range of human experience and endeavor. As the student proceeds to academic specialization, each academic department maintains and nurtures this integrating perspective.

CORE REQUIREMENTS

COMMUNICATION - 9 semester hours

ENGL 1113 and 1123
And 3 hours from SPCH 1133, 1233, or 2423

MATHEMATICS - 3 semester hours

MATH 1053, 1203, 1233, 1433, 1534, 1634, 1734, 2033, 2043

SCIENCE - 6 semester hours

BIOL 1134, 1144, 1234, 1544
CHEM 1103, 1141 and 1143, 1303, 1241 and 1243
ENSC 1114

GEOS 1134, 1234
 GNSC 1104, 1204 (for teacher certification students only)
 PHYS 1144, 1244, 1533, 1624, 2104, 2204, 2644

HUMANITIES & VISUAL AND PERFORMING ARTS - 9 semester hours

Six hours from English literature, history, humanities, philosophy, or two semesters of one foreign language; any courses in art history, music history, or theatre history may also be accepted in fulfillment of the humanities requirement:

ENGL 2413, 2423, 2613, 2623, 2723, 2813, 2823
 HIST 1333, 1433, 3133
 HUMN 2013, 2023, 2033, 2043, 2053 or the 4000-level counterparts provided no 4000-level course repeats the corresponding course taken at the 2000 level.
 PHIL 1033, 1533, 2033, 2233, 2633
 FREN 1134, 1234
 GERM 1134, 1234
 SPAN 1134, 1234

3 hours from ART 1413, MUSC 1033, THEA 1503, MCOM 2213
 or
 3 hours from ART 1113, 1123, 1313, MUSC 1603/1601, THEA 1403
 or
 3 hours from MUSC 1001, 2001, 1021, 2021, 1071, and/or 2071

SOCIAL & BEHAVIORAL SCIENCES - 18 semester hours

HIST 1133 and 1233
 POLS 1333 and 1433
 ECON 1333, 2333, or 2433
 And 3 hours from PSYC 1103 or SOCL 1133

INSTITUTIONALLY DESIGNATED OPTION - 2 semester hours

Two different EXPH activity courses
 or
 One semester of marching band and one EXPH activity course
 or
 Two semesters of marching band

EXCEPTIONS TO PHYSICAL ACTIVITIES REQUIREMENT

A student may be excused from the physical activities requirement for the following reasons:

1. If the student is a veteran of the U.S. armed forces (discharged under honorable conditions) who has had one year of continuous active military service.
2. If the student has received a physical activities exemption through the Vinson Health Center. Students with disabling conditions should consult their physicians concerning enrolling in an adapted physical education course.

In cases where an exemption from physical activity is requested, the following should be submitted to the Vinson Health Center:

1. documentation from the student's physician, and
2. a letter from the student requesting the physical activity exemption.

REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE

Academic Foundations and Core Curriculum 48 hours (see page 91)

Six hours of literature and/or humanities courses chosen from the list below:

ENGL 2413, 2423, 2613, 2623, 2723, 2813, 2823

HUMN 2013, 2023, 2033, 2043, 4013, 4023, 4033, 4043

A humanities course taken at the 2000 level may not be repeated at the 4000 level or vice-versa.

Two years of one foreign language. International students who are native speakers of a language other than English may satisfy this requirement by petitioning the Foreign Language Department to verify proficiency in another language with the major college dean's approval. This waiver applies to all degree programs. A foreign language waiver does not exempt a student from the general humanities requirement.

Students may use the same literature, humanities, and foreign language courses to fulfill B.A. and core requirements, as well as major and/or minor requirements in these fields.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE

Academic Foundations and Core Curriculum 48 hours (see page 91)

Additional General Requirements

All B.S. degree programs include at least four laboratory science courses. Students must choose two courses in each of two different laboratory sciences, (exclusive of Physics 1533, Chemistry 1101, 1103, 1303, and Environmental Science 1114).

The B.S. degree programs in psychology and sociology require one mathematics course (exclusive of MATH 0003, 1003, 1053, 1203, 2033, and 2043).

All other B.S. degree programs include at least two mathematics courses (exclusive of MATH 0003, 1003, 1053, 1203, 2033, and 2043). Statistics 3573 may be used to satisfy three hours of this mathematics requirement.

The science and math courses may be included as part of the major and/or minor.

Requirements for Other Degrees

REQUIREMENTS FOR THE ASSOCIATE OF APPLIED
SCIENCE IN RADIOGRAPHY DEGREE

See page 249

REQUIREMENTS FOR THE BACHELOR OF
APPLIED ARTS AND SCIENCES DEGREE

See page 274

REQUIREMENTS FOR THE BACHELOR OF
BUSINESS ADMINISTRATION DEGREE

See page 108

REQUIREMENTS FOR THE BACHELOR OF FINE ARTS DEGREE

See page 171 for art

See page 204 for theatre

REQUIREMENTS FOR THE BACHELOR OF
MUSIC DEGREE

See page 189

REQUIREMENTS FOR THE BACHELOR OF
SCIENCE IN ATHLETIC TRAINING DEGREE

See page 213

REQUIREMENTS FOR THE BACHELOR OF
SCIENCE IN CLINICAL LABORATORY SCIENCE DEGREE

See page 336

REQUIREMENTS FOR THE BACHELOR OF SCIENCE
IN CRIMINAL JUSTICE DEGREE

See page 222

REQUIREMENTS FOR THE BACHELOR OF
SCIENCE IN DENTAL HYGIENE DEGREE

See page 229

REQUIREMENTS FOR THE BACHELOR OF
SCIENCE IN EXERCISE PHYSIOLOGY DEGREE

See page 219

REQUIREMENTS FOR THE BACHELOR OF
SCIENCE IN INTERDISCIPLINARY STUDIES DEGREE

See page 133

REQUIREMENTS FOR THE BACHELOR OF
SCIENCE IN MECHANICAL ENGINEERING DEGREE

See page 351

REQUIREMENTS FOR THE BACHELOR OF
SCIENCE IN NURSING DEGREE

See page 237

REQUIREMENTS FOR THE BACHELOR OF SCIENCE
IN RADIOLOGIC SCIENCES DEGREE

See page 249

REQUIREMENTS FOR THE BACHELOR OF SCIENCE
IN RESPIRATORY CARE DEGREE

See page 261

REQUIREMENTS FOR THE BACHELOR OF
SOCIAL WORK DEGREE

See page 268

SECOND BACHELOR'S DEGREE

A person who holds a baccalaureate degree from Midwestern State University or another regionally accredited four-year college or university may be awarded a second baccalaureate degree in a different field by:

1. Completing a minimum of 30 semester hours after conferral of the first degree, 18 of which must be advanced, in residence at Midwestern State University.
2. Completing all catalog requirements for the new major field and for the degree sought.
3. A person holding a baccalaureate degree from any college or university other than Midwestern State University will have to meet the Writing Proficiency Requirement.

APPLICATION FOR DEGREE CANDIDACY

To graduate at the end of the spring semester, all seniors must pay the graduation fee and file an Application for Degree Candidacy in the Office of the Registrar during the fall semester of their senior year (see University Calendar for deadline). Seniors who plan to complete their degrees at the close of the fall semester should pay and file no later than July 1. Candidates for summer graduation should file by April 1. Students may also apply for graduation on-line at <http://registrar.mwsu.edu/applygraduation/applydegree.asp>.

Early application is encouraged to allow time for a complete records check prior to the student's enrolling for the last semester.

In order to be admitted to candidacy for graduation without reservation, a student must have at least five grade points above the number of semester hours attempted on the official record at the time of application. Any student who enters the last semester or summer term in residence without a surplus of five grade points will be admitted with reservation and thereby forewarned that all degree requirements, both qualitative and quantitative, must be met.

COMMENCEMENT

Midwestern State University conducts commencement exercises in December and May. Candidates who complete their degrees during the summer terms may participate in the December ceremony. Candidates who complete their degrees in the fall semester are required

to attend the December commencement unless approved by the Provost for graduation in absentia. Candidates who complete their degrees at the end of the spring semester must attend the May commencement unless approved by the Provost for graduation in absentia. Conferred degrees will be posted to students' permanent records as of the last day of finals for second summer term or as of the date of the graduation ceremony for December and May.

REQUIREMENTS FOR PRE-PROFESSIONAL CURRICULA

In selecting any pre-professional program, the student should be mindful that the requirements vary with different schools. Therefore, the student should always obtain a catalog from the professional school under consideration so that the course of study can be arranged to meet specific requirements.

If possible, the student should complete work for the bachelor's degree since many professional schools require the degree as a prerequisite for admission.

The pre-professional student should confer with the advisor in planning a course of study. Several pre-professional curricula have been prepared which indicate the minimum requirements of the professional schools. A copy may be obtained from the student's advisor.

Pre-dentistry, pre-engineering, pre-law, pre-medicine, pre-nursing, pre-osteopathy, pre-optometry, pre-pharmacy, pre-physical therapy, and pre-veterinary medicine are some of the pre-professional programs which may be taken at Midwestern State University. MSU also participates in the Dental Early Acceptance Program (DEAP) with the University of Texas Health Science Center at San Antonio. See page 342.

A student interested in completing a pre-professional program other than those listed above should consult the college dean of a closely related field so that the program can be planned in keeping with catalog requirements of the institution where the student plans to complete the professional training. See the most recent Schedule of Classes for an updated listing of pre-professional advisors.

GRADUATE SCHOOL

The following master's degrees are offered at Midwestern State University:

Master of Arts

Majors offered in counseling, English, history, human resource development, political science, psychology, and training and development

Master of Business Administration

Major offered in business administration

Master of Education

Majors offered in curriculum and instruction, educational leadership, educational technology, reading education, school counseling, special education, and sport administration

Master of Health Administration

Major offered in health services administration

Master of Public Administration

Major offered in public administration

Master of Science

Majors offered in biology and computer science

Master of Science in Exercise Physiology

Major offered in exercise physiology

Master of Science in Nursing

Majors offered in family nurse practitioner, family psychiatric mental health nurse practitioner, and nurse educator

Master of Science in Radiologic Sciences

Majors offered in radiologic administration, radiologic education, and radiologist assistant

Graduate minors are available in bilingual education, biology, early childhood education, educational foundations, educational technology, English, English as a second language, history, master mathematics teacher, mathematics, political science, public administration, reading education, special education, sport administration, Superintendency, teacher leadership, and training and development. Graduate certificates in administration of justice and health services administration are offered by the College of Health Sciences and Human Services. The West College of Education offers programs leading to certificates for Superintendent, Principal, School Counselor, Diagnostician, Master Mathematics Teacher, Master Reading Teacher, as well as a Graduate Initial Teacher Certification.

For more information about the graduate programs please refer to the Graduate Catalog.

APPLICABILITY OF CATALOG REGULATIONS

A student may receive a degree from Midwestern State University in accordance with the program requirements stated in the catalog in effect at the time that person enters the University or those of any subsequent year provided the requirements are completed within six years of the date of the catalog selected and the student earns a minimum of twelve semester hours during the two-year period it is in effect. The program requirements must be from one catalog. However, the general requirements for the associate and baccalaureate degrees are those which are shown in the current catalog.

THIS CATALOG EXPIRES AND CANNOT BE USED FOR GRADUATION REQUIREMENTS AFTER AUGUST 31, 2019.

Midwestern State University reserves the right to make changes in course offerings, academic policies, academic calendar, tuition, fees, other charges, rules, and regulations as required by the Academic Council, the Board of Regents, the Texas Higher Education Coordinating Board, state and national testing agencies, and the Texas Legislature. The provisions of this catalog are not to be regarded as a contract between the University and its students or applicants. The MSU catalog is also available on the MSU website. The web version will contain policy updates as they are approved and effective. The updated web version will take precedence over the printed catalog.

A separate publication, *The Student Handbook*, is issued once each year. The rules and regulations stated in the handbook are applicable to all students.





**SPECIAL
ACADEMIC
PROGRAMS**

Bachelor of Science in Clinical Laboratory Science
Bachelor of Science in Dental Hygiene
Bachelor of Science in Mechanical Engineering
Bachelor of Science in Nursing - RN/BSN Track
Bachelor of Science in Radiologic Sciences
Bachelor of Science in Respiratory Care – RRT to BSRC
Honors Program
Intensive English Language Institute
International Programs
Air Force ROTC through the University of North Texas

SPECIAL ACADEMIC PROGRAMS

ACADEMIC FOUNDATIONS CURRICULUM FOR DESIGNATED ACADEMIC PROGRAMS

The following basic core and additional requirements apply to the Bachelor of Science in Clinical Laboratory Science, Bachelor of Science in Dental Hygiene, Bachelor of Science in Mechanical Engineering, Bachelor of Science in Nursing - RN/BSN Track, Bachelor of Science in Radiologic Sciences, and Bachelor of Science in Respiratory Care – RRT to BSRC.

Basic Core (27 semester hours)

Political Science 1333, 1433

English 1113, 1123

Mathematics 1053, or 1203, or 1233*, or 1634**

History 1133, 1233

Speech Communication - 3 hours

Demonstrate computer literacy by earning credit for a proficiency test or in
CMPS 1013, 1033, 1044, or EDUC 1023. ***

* Math 1233 is required for BSCL.

** Math 1634 is required for BSME.

*** BSME students meet this requirement by taking MENG 3243 in the major.

Additional 18 hours

Select from at least four of the following areas: Social and Behavioral Sciences, Sciences, Fine Arts, Speech Communication (cannot be same course used in Basic Core), Humanities, Economics, and Exercise Physiology.

Additional degree requirements -- see specific pages below:

Bachelor of Science in Clinical Laboratory Science (see page 336)

Bachelor of Science in Dental Hygiene (see page 229)

Bachelor of Science in Mechanical Engineering (see page 351)

Bachelor of Science in Nursing - RN/BSN Track (see page 237)

Bachelor of Science in Radiologic Sciences (see page 249)

Bachelor of Science in Respiratory Care – RRT to BSRC (see page 261)



UNIVERSITY HONORS PROGRAM

Director: Dr. Michael Vandehey
Professor of Psychology

First established in 1964, the University Honors Program offers high-achieving MSU students a challenging undergraduate learning experience. Beginning with the Honors Introductory Seminar and continuing with Honors designated classes taught by outstanding faculty, the MSU Honors Program presents an interdisciplinary curriculum that fosters students' love for learning. Honors experiences and achievements prepare students for success and leadership in graduate and professional schools, in the job market, and as citizens of our global community.

To graduate with Honors Program distinction, students must successfully complete a minimum of eight courses as specified by the Honors Program. Honors students must maintain a minimum cumulative GPA of 3.25. In addition to these curricular requirements, the Honors Program requires participation in a variety of enriching, co-curricular activities, such as professional conferences, field trips, community service, and a choice of undergraduate research projects, internships, or study abroad. Students must visit the Honors Program Office to be advised about their Honors curricular and co-curricular requirements. The Honors Program has an entire floor in McCullough-Trigg Hall offering students a supportive living and learning environment.

Admission to the Honors Program is by application, and requires a written essay and a letter of recommendation. Incoming freshmen must meet ONE of the following requirements: a minimum combined SAT score of 1200, a minimum composite ACT score of 27, high school graduation with an IB diploma, or high school graduation in the top 10%. Under special circumstances individuals may be granted provisional status based on relevant outstanding achievements. Continuing students, including transfer students, may apply to the Honors Program if they have at least 75 semester hours left to complete at MSU. Honors students in good standing receive a yearly Honors scholarship.

Midwestern State University is a member of the National Collegiate Honors Council and the regional Great Plains Honors Council. These affiliations broaden the scope of opportunities available for Honors students.

The selection of Honors designated courses includes a required course:

MWSU 1433. Honors Introductory Seminar 3(3-0)

This team-taught, interdisciplinary class is designed to guide Honors students in their transition to the University, to sharpen their academic skills, and to introduce them to University faculty members representing various fields of study. In this course, Honors students learn how to use various research methods to acquire and process knowledge in different fields, how to relate ideas learned in one discipline to those learned in others, and how to participate meaningfully in a learning community.

Occasionally other courses are offered exclusively for students participating in the Honors Program:

MWSU 2033. Information Skills in a Networked Environment 3(3-0)
An introduction to research principles and techniques; will cover the creation and execution of research strategies; the critical evaluation of information; the appropriate use of citations and ethical issues in the field of information gathering commonly useful in academic libraries and other research institutions.

MWSU 4433. Honors Seminar 3(3-0)
Intensive study and coverage of selected topics of an interdisciplinary nature. May be repeated for credit when topics vary.

For more information please contact the MSU Honors Program at (940) 397-4534, honors@mwsu.edu or <http://academics.mwsu.edu/honors>.

INTENSIVE ENGLISH LANGUAGE INSTITUTE

The Intensive English Language Institute (IELI) offers intensive courses of English language instruction to non-native speakers of English who want to increase their English language proficiency for personal, academic, or professional reasons. The IELI's academic program is divided into eight levels. Each level's curriculum includes classes in grammar, listening and speaking, composition, and reading. The IELI's courses are available to full-time, non-native English speaking (F-1, J-1 visa) students and to members of the Wichita Falls community who wish to enhance their English language skills. Graduate and undergraduate Midwestern State University students who wish to improve their English language skills may enroll in English language courses through the IELI.

The purpose of the IELI curriculum is to provide quality instruction in English, develop academic skills, and provide exposure to American culture for individuals from a wide range of backgrounds and language experiences. Courses are primarily content-based and help prepare students for university studies, life in the United States, and/or work in the American business community.

Admission to the IELI does not constitute admission to the University for purposes of enrolling in courses for academic credit.

INTERNATIONAL PROGRAMS

Midwestern State University is committed to providing study-abroad opportunities for all students, whether graduate or undergraduate. To facilitate international study, the Office of International Programs has been established with the expressed objective of providing support for any student who wishes to study in an international setting. Scholarships and financial aid have been set up specifically to offset a student's study-abroad expenses. Necessary documentation and mandatory orientations for all study-abroad students ensure that each student's experience will not be interrupted unnecessarily. Additionally, each study-abroad program is committed to academic excellence as well as to the standards set forth by the University. All international classes have rigorous requirements and offer the kind of intellectual stimuli usually found in honors courses.

For more information, please contact the Office of International Programs at (940) 397-4038 or <http://academics.mwsu.edu/internationaleducation>.

AIR FORCE ROTC PROGRAM Through the University of North Texas

MSU students are given the opportunity to participate in the Air Force ROTC program at the University of North Texas.

As an integral part of the university curriculum, the Air Force ROTC program (Aerospace Studies) recruits, educates and commissions officer candidates. The Air Force ROTC program consists of three parts: 1. the General Military Course (first two years), 2. Summer Field Training Encampment, and 3. the Professional Officer Course (last two years). Students enroll in AERO classes at the same time and in the same manner as they enroll for other university courses. AERO courses normally receive academic credit as part of a student's electives. Each instructor is an active duty Air Force officer. MSU students participating in AFROTC will typically commute to UNT once a week to attend academic classes, leadership laboratories, and physical training.

Four-Year Program

The first two years of the Air Force ROTC four-year program -- the General Military Course (GMC) -- consist of one hour of classroom work and two hours of leadership laboratory each week. Cadets who wish to compete for an enrollment allocation and entry into the last two years of the program -- the Professional Officer Course (POC) -- must do so under the requirements of the Professional Officer Course Selection System. This system uses such factors as grade-point average, unit commander evaluation, and aptitude test scores to determine a student's officer potential. After POC selection, students must complete a four-week, field training encampment at an assigned Air Force base. Cadets enrolled in the POC attend class three hours a week and participate in a weekly leadership laboratory lasting two hours. All GMC and POC cadets must participate in weekly physical training.

In the POC, cadets apply what they have learned in the GMC and at field training. The AFROTC detachment at UNT has a cadet corps based on the Air Force organizational pattern of flight, squadron, group and wing. POC cadets are assigned to leadership positions, conduct the leadership laboratories and manage the unit's cadet corps.

Once enrolled in the POC, cadets are enlisted in the Air Force Reserve and assigned to the obligated reserve section. This assignment entitles them to a monthly, non-taxable allowance during the academic year.

Two- and Three-Year Programs

The last two years of the AFROTC program consist of the Professional Officer Course (POC). Students with at least two undergraduate academic years remaining at the university may apply for a two- or three-year program, sign up for GMC courses, and compete for an enrollment allocation for entry into the POC. Entrance into the POC is highly competitive; two- and three-year applicants must be selected through the system described above.

Two- and three-year applicants must also complete a six-week field training encampment. The additional two weeks of field training prepare them for entry into the POC.

Leadership Laboratory

Cadets must take a required Leadership Laboratory (LLAB) for approximately two hours per week throughout their enrollment in AFROTC. LLAB is conducted within the framework of the cadet organization with a progression of experiences designed to develop each student's leadership potential. The curriculum involves study of Air Force customs and courtesies, drill and ceremony, career opportunities in the Air Force, and the life and work of an Air Force junior officer. Students develop leadership in a wide variety of practical, supervised environments.

Physical Training

Each cadet must participate in two one-hour Physical Training (PT) sessions per week. PT is designed to motivate cadets to pursue an active, physically fit lifestyle. Cadets must meet Air Force physical fitness requirements to enter into the POC and to be commissioned.

Uniforms and Textbooks

Uniforms and textbooks for AFROTC courses are issued at no cost to the cadets.

Scholarships

Current practice in the Air Force ROTC college scholarship program is to award scholarships mainly to candidates pursuing undergraduate engineering or other scientific and technical disciplines. Nearly 90 percent of Air Force ROTC scholarships are awarded in these disciplines. However, students in every degree program enjoy scholarship opportunities as the Air Force seeks to engage students who excel both academically and militarily. Scholarships are awarded at various amounts for periods of four, three, or two years.

Eligibility Requirements

Air Force ROTC is open to male and female university students completing any undergraduate academic degree.

GMC entry requirements include

1. Full-time student (minimum 12 hours).
2. Good physical condition.
3. Good moral character.
4. Ability to compete for POC before reaching 29 years if programmed for flying training, or 30 years if programmed for non-flying training.

POC entry requirements include

1. 1-4 above.
2. U.S. citizenship.
3. At least 2.0 cumulative grade point average; 2.5 if awarded an Air Force scholarship.
4. At least two undergraduate academic years remaining at the university.
5. Passing score on the Air Force Officer Qualification Test (AFOQT).
6. Passing score on the Air Force Physical Fitness Test.

7. Passing the Air Force medical examination.
8. Completing Summer Field Training encampment.

Contact the Aerospace Studies Department at (940) 565-2074 for additional information on how to join.

Active-Duty Service Commitments

Cadets in the POC and second-year Air Force scholarship cadets are contract cadets who agree to accept a commission as a second lieutenant in the Air Force after completing all Air Force ROTC and academic degree requirements. Most cadets incur a four-year, active-duty commitment which begins after commissioning.

For more information on Air Force ROTC, students should contact:

Recruiting Flight Commander
Division of Aerospace Studies
AFROTC Detachment 835
(940) 565-2074

Aerospace Studies, Department Chair
1155 Union Circle #305400
Denton, TX 76203-5400
(940) 565-2074
AFROTCDet835@unt.edu

The courses which may be taken in this AFROTC program are listed below.

COURSES IN MILITARY SCIENCE (MLSC)

These are Air Force ROTC courses taught at the University of North Texas, Denton, Texas.

1030. 1040. 2030. 2040. 3310. 3320. 4310. 4320. Physical Training

These courses enhance the fitness level of cadets, prepare them to meet AFROTC and Air Force standards, motivate cadets to pursue a physically fit and active lifestyle, and improve both the safety and efficiency of physical training within AFROTC.

1031. 1041. Foundations of the United States Air Force 1(1-1)

Survey of the structure and missions of Air Force organizations; officership and professionalism; and an introduction to communication skills. (AERO 1030, 1040)

2031. Evolution of the United States Air Force Air and Space Power 1(1-1)

Focus on the development of air power from the earliest beginnings through two world wars; the evolution of air power concepts and doctrine; and assessment of communicative skills. (AERO 2030)

2041. Evolution of the United States Air Force Air and Space Power 1(1-1)

Focus on concepts that develop officer leadership skills, ethics and values, group problem solving, leadership methods, and communications. (AERO 2040)

2921. Cooperative Education in Aerospace 1(1-0)

Prerequisites: Student must meet employer's requirements and have consent of the division chair.

Supervised work in a job directly related to the student's major, professional field of study or career objective. May be repeated for credit. (AERO 2920)

3314. 3324. Leadership and Management 4(3-1)

Prerequisite for 3324: MLSC 3314.

Study of leadership and quality management fundamentals, professional knowledge, leadership ethics and communication skills required of an Air Force officer. Case studies are used to examine Air force leadership and management situations to demonstrate practical application of the concepts being studied. (AERO 3310, 3320)

4314. 4324. National Security 4(3-1)

Prerequisite for 4314: MLSC 3314, 3324.

Prerequisite for 4324: MLSC 4314.

Examines the need for national security, analyzes the evolution and formulation of the American defense policy, strategy, and joint doctrine; investigates the methods for managing conflict; and provides an overview of regional security, arms control and terrorism. Special topics include the military as a profession, officership, the military justice system, and current issues affecting military professionalism. (AERO 4310, 4320)





**ACADEMIC
PROGRAMS**

**Dillard College of Business Administration
Gordon T. and Ellen West College of Education
Lamar D. Fain College of Fine Arts
College of Health Sciences and Human Services
Prothro-Yeager College of Humanities and Social Sciences
College of Science and Mathematics**

DILLARD COLLEGE OF BUSINESS ADMINISTRATION

Terry Patton, Dean (Dillard College of Business Administration Building 239)

MISSION STATEMENT FOR THE DILLARD COLLEGE OF BUSINESS ADMINISTRATION

At the Dillard College of Business Administration our vision is to be recognized as the center of excellence in business education and service in North Central Texas.

Our Mission is to provide for our students an educational experience that develops the knowledge and competencies needed for professional career entry and mobility, and leadership. For our stakeholders, the Dillard College provides specialized services that contribute to the economic education, development, and vitality of our region.

The University's liberal arts tradition establishes a strong foundation upon which Dillard College's commitment to professional, high quality business education is built. Our academic programs reflect this strong commitment to a tradition of excellence. The College's global reach is illustrated by the cultural, ethnic, and geographic diversity of its students and faculty. This diverse environment fosters the multicultural perspectives critical to success in the dynamic global marketplace.

The culture of Dillard College is characterized by meaningful interaction between students and faculty amid continuous improvement in teaching excellence. Faculty research in applied, pedagogical, and basic traditions further strengthens the educational experience.

REQUIREMENTS FOR THE BACHELOR OF BUSINESS ADMINISTRATION

The Bachelor of Business Administration (B.B.A.) degree is offered with majors in accounting, economics, finance, general business, management, management information systems, and marketing.

Minors are offered in business administration, accounting, economics, entrepreneurship, and management information systems. (See pages 111, 113, 118, 125, and 116 for specific requirements.)

Teacher certification is available in basic business as a primary teaching field through the West College of Education. Students seeking teacher certification should check with the West College of Education concerning the specific requirements for teacher certification early in their college careers.

All candidates for a Bachelor of Business Administration (B.B.A.) degree must complete a program of at least 120 hours including exercise physiology requirements, if applicable. Candidates must satisfy all general requirements for a bachelor's degree (see page 89) as well as requirements listed below.

ACADEMIC FOUNDATIONS AND CORE CURRICULUM (see page 91)

Candidates for the B.B.A. degree must satisfy all academic foundations and core curriculum requirements (see page 91).

BUSINESS CORE

To matriculate in the upper division business curriculum, students must have completed all nine (27 semester hours) of the business core courses listed below (with an overall GPA of 2.2) and have completed an additional 21 hours in the university core.

- BUAD 1033 Foundations of Business
- ENGL 1113 Rhetoric and Composition
- ENGL 1123 Rhetoric and Composition
- MATH 1203 Mathematical Analysis for Business OR MATH 1233 College Algebra
- ACCT 2143 Financial Accounting
- ACCT 2243 Managerial Accounting
- MIS 2003 Information Technology Concepts for Business
- ECON 2333 Macroeconomics¹
- ECON 2433 Microeconomics

¹ Business majors must take this option in the Academic Foundations.

PROFESSIONAL BUSINESS CORE

After satisfying the business core requirements discussed above, students pursuing the B.B.A. degree may begin taking upper-level business courses including those listed in the Professional Business Core. To receive the B.B.A. degree in most business programs, students must successfully complete all nine (27 semester hours) of the Professional Business Core courses listed below.

- MGMT 3013 Organizational Behavior in Business
- BUAD 3033 Business and Economic Statistics
- MIS 3003 Management Information Systems
- BUAD 3323 Business Ethics
- LSBA 3233 Legal Environment of Business
- MGMT 3453 Operations Management
- MKTG 3723 Principles of Marketing
- FINC 3733 Business Finance
- MGMT 4853 Strategic Management

REQUIREMENTS FOR MAJORS IN BUSINESS ADMINISTRATION

Students may select a major in accounting, economics, finance, general business, management, management information systems, or marketing. The course of study during the first two years is similar for all business administration majors.

Specific requirements for a major in the undergraduate program are listed below. Each major requires the courses in the Professional Business Core plus other courses specific to the particular major selected. Students must earn a minimum overall grade point average of 2.0 in the major and the Professional Business Core (on the courses attempted at Midwestern State University).

Total hours granted for internships in all areas of business administration may not exceed six hours of credit.

Double Majoring

Students pursuing a B.B.A. degree may opt to major in up to two of the following business disciplines: accounting, economics, finance, general business, management, management information systems, or marketing. Each major will require at least twenty-four additional semester hours of coursework beyond: the general requirements, the academic foundation and core curriculum requirements, the business core requirements, and the professional business core requirements common to all B.B.A. degrees. In completing these major-specific requirements for both majors, students may find that their two chosen majors have some major-specific courses in common. If so, up to six hours of common, major-specific coursework may be double-counted towards both majors. Students seeking a B.B.A. degree with a double major cannot have a minor in any other discipline inside of the Dillard College of Business Administration.

Transfer Credit

All transfer credit intended to satisfy degree requirements will be evaluated and acceptance determined by Midwestern State University. Business courses (including accounting, finance, marketing, management, business law, and information systems) taken at junior or community colleges that are offered at Midwestern State University as upper division courses (3000 or above) are not normally accepted as credit toward degree requirements for the B.B.A.

Suggested Minor in International Studies

In our increasingly global environment, students must be prepared for careers that transcend local, regional, and national boundaries. Students have the opportunity to expand their global perspective both within the curriculum of the Dillard College of Business Administration and by selecting a minor in International Studies (see page 302). A minor in International Studies can provide the diversity that leads to a successful career in the ever-expanding global economy. This interdisciplinary minor develops global perspective and understanding of across cultures while offering specialization in advanced studies in global perspectives.

Major with Minor

Pursuing both a major and minor within the Dillard College of Business Administration: Students pursuing a B.B.A. degree and wanting to obtain a minor in a different business discipline may opt to minor in accounting, economics, entrepreneurship, or management information systems. Students seeking a B.B.A. degree are not permitted to minor in business administration. To obtain the minor, students must fulfill coursework specified in the catalog of their chosen minor. Students seeking both a major and a minor within the Dillard College of Business Administration may not use their business core courses, their professional business core courses, or their major-specific courses to satisfy any portion of the coursework required for the minor.

Academic Advising Center

The Academic Advising Center of the Dillard College of Business Administration provides academic advising and degree planning for the first- and second-year students majoring in the business disciplines. The professional advising staff helps students achieve their academic goals. This individualized attention includes academic programs and majors, course selection, and schedules. Students work with the professional advising staff until they

successfully complete the business core and other university requirements. The Dillard College of Business is committed to personalized and high quality advising ensuring that students receive optimum support in obtaining an excellent education and superior job opportunities.

Internship Program

The Dillard College of Business Academic Internship Program provides undergraduate and graduate students the outstanding opportunity to experience their chosen career field while enrolled in their academic program. The program helps students apply their scholarship knowledge, gain relevant business experiences, build their professional resumes, and develop important professional networks.

Students may apply for internships with businesses representing a wide array of industries. Students work with a practitioner in a firm in which they have been accepted. A faculty sponsor, the professional in the firm, and the student collaborate on goals so that the internship will integrate theory with the experiences of the real world. Upon the satisfactory completion of an internship, students receive three hours of college credit. Most of the internships are paid so that students earn while they learn.

Students who are juniors and seniors with a GPA of 2.5 or higher are eligible to participate in the internship program. Graduate students who have a GPA of 3.0 or higher are also eligible to participate in the internship program. Students are required to spend a minimum of 150 hours on the job.

Information and application instructions can be obtained from the Coordinator of the Academic Internship Program located in the Advising Center in the Dillard College of Business Administration.

REQUIREMENTS FOR MINOR IN BUSINESS ADMINISTRATION (21 semester hours)

ACCT 2143 and 2243, BUAD 3033, ECON 2433, FINC 3733, MGMT 3013, and MKTG 3723.

NOTE: Students minoring in business administration should take ECON 2333, MIS 2003, and MATH 1203 or 1233 instead of the other options listed under the Academic Foundations and General Degree Requirements.

COURSES IN BUSINESS ADMINISTRATION (BUAD)

1033. Foundations of Business (TCCNS = BUSI 1301) 3(3-0)

A general survey course introducing the functional areas of business. This course introduces the beginning business student to various business disciplines and demonstrates their interrelationships. Ethical issues and decision making facing the business person, managing in the global environment, leadership, managing communication, and personal presentation are introduced.

3033. Business and Economic Statistics 3(3-0)

Prerequisites: Junior standing or above or consent of the chair, MATH 1203 or MATH 1233, and MIS 2003 or equivalent.

Introduction to statistical methods for the analysis of problems encountered in business and economics. Topics include descriptive statistics, probability and probability distributions, sampling and sampling distributions, estimation, hypothesis testing, analysis of variance, and simple and multiple regression and correlation.

3103. **MIS for Non-Business Majors** 3(3-0)
 Prerequisite: BAAS major or consent of instructor.
 Introduction to management information systems and the importance of systems in achieving organizational goals. Includes an overview of hardware, software, databases, and other technology impacting management issues. May not be counted toward a major or minor within the Dillard College of Business Administration.
3223. **Business Communications** 3(3-0)
 Prerequisite: Junior standing or above or consent of the chair.
 Study and applications of the concepts of inter- and intra-organizational communication - oral and written. Includes listening skills, letters, memos, proposals, resumes, giving instructions, chairing meetings, and interviews.
3323. **Business Ethics** 3(3-0)
 Prerequisite: Junior standing or above or consent of the chair.
 An introduction to the ethical dilemmas faced by business persons and business leaders. This course will introduce students to the concepts required for ethical decision making in the current business environment and will examine ethical standards to which business leaders should adhere. This course should enable the student to examine ethical dilemmas from various perspectives and understand ethical issues from varying perspectives.
4893. **Internship in Business Administration** 3(3-0)
 Prerequisites: See requirements under Internship Programs in Requirements for Majors in Business Administration, page 111.
 Field experience in selected areas of business administration with local or regional organizations. May involve a specific project or theoretical integration with the “real world.” May be repeated once. Must be approved with all paperwork completed prior to registration. Total hours granted for internships in all areas of business administration may not exceed six hours of credit.
4993. **International Issues in Business** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair, and consent of the instructor.
 Examination of government regulation and culture in the European Union as it affects the different disciplines of business.

ACCOUNTING and MANAGEMENT INFORMATION SYSTEMS

Ralph Fritsch, Chair (Dillard College of Business Administration Building 287)

Professor: Fritsch

Associate Professors: Gaharan, Johnston, Patton, Thomas

Assistant Professors: G. Zhang, J. Zhang

Instructors: Raulston, Vowell

Professors Emeriti: Bauer, C. Harris, T. Harris, Madera, McInturff

ACCOUNTING

REQUIREMENTS FOR THE B.B.A. WITH A MAJOR IN ACCOUNTING

General: (see page 89)

Academic Foundations and Core Curriculum: (see page 91)

Business Core: (see page 109)

Professional Business Core: (see page 109)

Courses for Major in Accounting: (30 semester hours)

ACCT 3023, 3033, 3043, 3073, 3203, 4063, 4333; LSBA 3243; and six accounting elective hours selected from ACCT 4083, 4123, 4223.

Approved electives to bring total to 120 semester hours including exercise physiology requirements, if applicable.

Certification as a Certified Public Accountant (CPA)

The Texas State Board of Public Accountancy currently requires the completion of 150 semester hours including 36 hours of accounting and 24 hours of related business subjects. See educational requirements on the Texas State Board of Public Accountancy's website for current information.

The Texas State Board of Public Accountancy also requires 3 semester hours of approved ethics instruction as part of the 150-hour requirement. BUAD 3323, Business Ethics, fulfills this requirement. The Board also requires 4 semester hours of accounting research and communication. This requirement can be fulfilled by completing ACCT 4063 (Auditing), and ACCT 4223 (Accounting Research and Communication).

REQUIREMENTS FOR A MINOR IN ACCOUNTING: (18 semester hours)

ACCT 2143, 2243, 3023, 3033, and six advanced hours.

COURSES IN ACCOUNTING (ACCT)

2143. **Financial Accounting** (TCCNS = ACCT 2301) 3(3-0)

Prerequisite: MATH 1203 or 1233.

Introduction to fundamental concepts and principles underlying accounting information, the accounting cycle, service and merchandising operations, sole proprietorships and partnerships, and corporations.

2243. **Managerial Accounting** (TCCNS = ACCT 2302) 3(3-0)

Prerequisite: ACCT 2143.

Accounting for cash flows, financial statement analysis, responsibility and cost accounting, and budgeting.

3003. **Accounting Applications** 3(3-0)

Prerequisite: ACCT 2243.

Preparation of basic federal tax returns for individuals; usage of computerized software (such as Quick Books) for bookkeeping; usage of mainstream office applications (such as Microsoft Access and Microsoft Excel) for accounting. Designed for majors other than accounting; may not be taken by accounting majors or minors to satisfy accounting requirements.

3023. **Accounting Information Systems** 3(3-0)

Prerequisites: Accounting major or minor, or consent of the chair; and a grade of "C" or higher in ACCT 2143 and ACCT 2243.

Use of accounting data as an information system; general ledger programs and sub-programs relevant to the basic accounting cycle.

- 3033. Intermediate Accounting I** 3(3-0)
Prerequisite: FINC 3733 or concurrent enrollment.
Financial accounting theory and problems; statement presentations; an intensive course combining theory and practical applications.
- 3043. Intermediate Accounting II** 3(3-0)
Prerequisite: ACCT 3033 with a grade of "C" or higher.
A continuation of Accounting 3033. An intensive course combining theoretical concepts and practical applications of accounting for a wide range of business activities.
- 3073. Federal Income Tax I** 3(3-0)
Prerequisites: ACCT 2143 and ACCT 2243 with grades of "C" or higher.
General concepts of federal income taxation applicable to individuals and businesses.
- 3203. Cost Accounting I** 3(3-0)
Prerequisites: ACCT 2143 and ACCT 2243 with grades of "C" or higher.
Theory and procedures used in determining costs of business operations with emphasis on manufacturing accounting for materials, labor, and overhead in job order, process, and standard cost systems.
- 3633. Financial Analysis** 3(3-0)
Prerequisites: Junior standing or above or consent of the chair, ACCT 2143, ACCT 2243, and MATH 1203 or MATH 1233.
The study of financial tools and techniques used to analyze financial statements and other information for the purpose of deriving reasonable judgments about past, present, and future conditions of a firm and the effectiveness of its management. Dual listed with FINC 3633.
- 4013. Petroleum Accounting** 3(3-0)
Prerequisite: ACCT 3023.
Basic financial accounting and reporting requirements for oil-and gas-producing companies, fiscal processes of a petroleum company, and compliance requirements of professional and regulatory organizations.
- 4063. Auditing** 3(3-0)
Prerequisite: ACCT 3033.
Theory, practice, and procedure of auditing; internal accounting control; auditing standards and principles; working papers and reports.
- 4083. Federal Income Tax II** 3(3-0)
Prerequisite: ACCT 3073.
Survey of federal income tax laws applicable to corporations, partnerships and S-corporations, and fiduciary relationships.
- 4123. Advanced Accounting** 3(3-0)
Prerequisite: ACCT 3043 or concurrent enrollment.
Intensive study of special areas in accounting with emphasis on consolidated statements; other topics include multinational companies, fiduciaries, insolvencies, partnerships, and fund accounting. This material is heavily tested on the CPA Exam.
- 4223. Accounting Research and Communication** 3(3-0)
Prerequisite: ACCT 4063.
Introduces students to professional accounting research. The course includes a study of

the authoritative sources useful for accounting research. Students research, analyze, develop, and present proposed solutions to accounting and related business cases found in practice using such modern information technology resources and databases as the Financial Accounting Research System (FARS). The results of the research will be presented both written and orally. This course meets a requirement of the Texas State Board of Public Accountancy (TSBPA).

4333. Governmental and Nonprofit Entity Accounting 3(3-0)

Prerequisite: ACCT 3043.

Application of accounting principles and systems of budgeting, accounting, and reporting of governmental units and other nonprofit entities.

4551, 4552, 4553. Independent Study in Accounting 1-3 semester hours

Prerequisite: Consent of the chair.

May be repeated with different content.

4663. Special Topics in Accounting 3(3-0)

Topics vary. May be repeated with different content.

4893. Internship in Accounting 3(3-0)

Prerequisites: See requirements under Internship Programs in Requirements for Majors in Business Administration, page 111.

Accounting field experience with local or regional firms. Provides significant accounting work experience with training and supervision by an employer. A written report and employer evaluation are required. May be repeated once. Must be approved with all paperwork completed prior to registration. Total hours granted for internships in all areas of business administration may not exceed six hours of credit.

MANAGEMENT INFORMATION SYSTEMS

REQUIREMENTS FOR THE B.B.A. WITH A MAJOR IN MANAGEMENT INFORMATION SYSTEMS

General: (see page 89)

Academic Foundations and Core Curriculum: (See page 91)

Business Core: (See page 109)

Professional Business Core: (See page 109)

Courses for Major in Management Information Systems: (27 semester hours):

MIS 3113, 3123, 3133, 3303, and 4143; plus twelve hours selected from: MIS 3163, 3203, 4113, 4153, 4323, 4333, 4663, or 4893.

Students pursuing a B.B.A. degree with a major in Management Information Systems must earn a grade of C or higher in MIS 3123 and 3133 taken at MSU or transferred from another college or university.

Approved electives to bring total to 120 semester hours including exercise physiology requirements, if applicable.

REQUIREMENTS FOR MINOR IN MANAGEMENT INFORMATION SYSTEMS (18 semester hours)

MIS 3003* Management Information Systems

MIS 3123 Database Design and Management

One approved programming language (C, C++, COBOL, Visual Basic, or Java)

Three advanced MIS courses approved by MIS Department Chair

* If students pursuing the minor are also pursuing a major in the Dillard College of Business Administration, then MIS 3003 is replaced by one additional advanced MIS course approved by the Department Chair.

COURSES IN MANAGEMENT INFORMATION SYSTEMS (MIS)

2003. Information Technology Concepts for Business (TCCNS = BCIS 1305) 3(3-0)

Prepares students for the role that information technology plays in today's businesses. Topics include advanced software applications, networking and the Internet, and business communications. The role of information systems and systems development in business operations is also discussed. This course is designed to support the College of Business curriculum and satisfies the general degree requirement for computer literacy for business majors.

3003. Management Information Systems 3(3-0)

Prerequisite: MIS 2003 or equivalent.

An introduction to management information systems and the importance of systems in achieving organizational goals. Topics include how to develop and maintain information systems to gain competitive advantage, to solve business problems, and to improve decision making.

3113. Business Programming Language 3(3-0)

Prerequisite: MIS 3003 or concurrent enrollment.

An introduction to a programming language which has relevance to business applications. Includes language theory and programming logic as well as implementation. May be repeated if topic differs.

3123. Database Design and Management 3(3-0)

Prerequisite: MIS 3003 or concurrent enrollment.

An examination of database management systems and their applications in business. Emphasis is placed on design, consideration of the end-user, and management of databases. There will be extensive hands-on use of a microcomputer-based database package.

3133. Business Systems Analysis 3(3-0)

Prerequisites: MIS 3003 and majoring or minoring in Management Information Systems.

Study of the analysis phase of the system development life cycle. Emphasis is placed on feasibility studies, requirement analysis, human factors, and preliminary design. Diagramming techniques and CASE tools, and team presentations will be studied and/or utilized.

3163. Project Management 3(3-0)

Prerequisite: MIS 3003 or concurrent enrollment.

Practical approach to business problem solving through the actual implementation of a software product. Includes study of project management tools and techniques necessary to plan, staff, organize, direct, and control the development of computer-based information systems.

- 3203. Electronic Commerce** 3 (3-0)
Prerequisite: MIS 3003 or concurrent enrollment.
This course will explore business uses of the tools and technologies needed for Electronic Commerce. Topics include business concepts, opportunities, challenges, and strategies that surround the emergence of electronic commerce. Problems related to the impact of electronic commerce such as social issues, risk, security, authentication, encryption, privacy, and methodologies will be discussed.
- 3303. Networking and Telecommunications** 3(3-0)
Prerequisites: MIS 3003 and majoring or minoring in Management Information Systems.
Telecommunication applications and regulating environment as they apply to business. An introduction to the technical aspects of current telecommunications technology and the managerial aspects of telecommunications in business organizations.
- 4113. Web Application Development** 3(3-0)
Prerequisite: MIS 3113 or consent of the instructor.
An extended introduction to dynamic web application design including advanced programming logic and implementation using server-side scripting language. The course will provide instruction in the advanced manipulation of data and the programming of sophisticated data-intensive applications. In this course emphasis will be placed on developing web-based business applications. Major topics covered include interface design, database access, web service concepts, and programming management.
- 4143. Business Systems Design and Implementation** 3(3-0)
Prerequisites: Grades of "C" or higher in MIS 3123 and 3133.
Study of the design and implementation phases of the system development life cycle. Emphasis is placed on detailed, physical design of a system and its implementation in a microcomputer environment. Students will work in a team environment to develop a prototype computer-based system for a client, either real or hypothetical.
- 4153. Data Mining and Business Intelligence** 3(3-0)
Prerequisites: MIS 3003 and BUAD 3033, or consent of the instructor.
This course provides an introduction to business intelligence concepts, methods, tools, and applications. Using SAS on-demand analytics software, students will apply business intelligence models on large datasets and make business decisions based on the analysis results.
- 4323. Business Network Design** 3(3-0)
Prerequisite: MIS 3303.
This course explores the telecommunication technologies used in wide area networks. Technologies such as frame relay, ATM, TCP/IP, and voice over IP will be studied. The role of the common carriers will also be discussed. Secure network traffic over TCP/IP and other security topics will be included.
- 4333. Advanced Database Design** 3(3-0)
Prerequisite: MIS 3123.
This course will allow faculty and students to explore emerging technologies and concepts within systems development including, but not limited to, data warehousing, data mining, knowledge management (KM), and other technologies necessary to facilitate the successful implementation of electronic business functions (e.g., e-commerce) and other enterprise systems.

4551, 4552, 4553. **Independent Study in Management Information Systems** 1-3 semester hours

Prerequisite: Consent of the chair.
May be repeated with different content.

4663. **Special Topics in Management Information Systems** 3(3-0)

Prerequisites: Management Information Systems major or minor, or consent of the instructor.

Topics vary. May be repeated with different content.

4893. **Internship in Management Information Systems** 3(3-0)

Prerequisites: See requirements under Internship Programs in Requirements for Majors in Business Administration, page 111.

Field experience in selected areas of information systems with local enterprises and agencies. May be repeated once. Must be approved with all paperwork completed prior to registration. Total hours granted for internships in all areas of business administration may not exceed six hours of credit.

ECONOMICS, FINANCE, GENERAL BUSINESS, and LEGAL STUDIES

Yoshi Fukasawa, Chair (Dillard College of Business Administration Building 209)

Professors: Fukasawa, Harmel, Martinez, Patin, Tilker

Associate Professors: Lei, Li

Assistant Professors: Gelves, Owen, E. Zhang

Professors Emeriti: Krienke, Rodriguez, Van Geem

ECONOMICS

REQUIREMENTS FOR THE B.B.A. WITH A MAJOR IN ECONOMICS

General: (see page 89)

Academic Foundations and Core Curriculum: (see page 91)

Business Core: (see page 109)

Professional Business Core: (see page 109)

Courses for Major in Economics: (27 semester hours)

ECON 3323, 3333, 3543, 3703, and FINC 3353, plus 12 semester hours of upper level economics. MGMT 4033 and/or FINC 3353 may be counted as one of the upper-level economics courses.

Economics majors planning to go on to a graduate program are strongly recommended to take additional mathematics courses including MATH 1634, 1734, and 3833.

Approved electives to bring total to 120 semester hours including exercise physiology requirements, if applicable.

REQUIREMENTS FOR A MINOR IN ECONOMICS (18 semester hours)

ECON 2433, plus 15 semester hours of upper-level economics which must include ECON 3323 or 3333.

Note: Economics minors should take ECON 2333 - Macroeconomic Principles instead of ECON 1333 - General Economics to fulfill the university core on page 91.

COURSES IN ECONOMICS (ECON)

1333. **General Economics** (TCCNS = ECON 1301) 3(3-0)
 A non-theoretical approach to describe economic involvement in relevant social and political matters. Subject matter will help meet the general need for improved economic reasoning. (Students majoring or minoring within the Dillard College of Business Administration should take ECON 2333 instead of this course.)
2333. **Macroeconomic Principles** (TCCNS = ECON 2301) 3(3-0)
 Scope and methodology of economics. Development of principles useful for understanding aggregate economics and for choosing policy to resolve such problems as unemployment, inflation, recession, economic stagnation, resource waste, and international trade issues.
2433. **Microeconomic Principles** (TCCNS = ECON 2302) 3(3-0)
 Prerequisite: MATH 1203 or MATH 1233.
 Economic principles to describe behavior of business firms under conditions of competition or monopoly and to explain what determines product and resource price levels. An application of economic tools to select problems in monopoly, income inequality, and taxation.
3323. **Intermediate Macroeconomics** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair, ECON 2333, and ECON 2433.
 Macroeconomic analysis is studied to identify forces affecting the economy's performance and to present theory useful in policy development to achieve society's economic goals.
3333. **Intermediate Microeconomics** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair, ECON 2333, and ECON 2433.
 An analysis of the overall functioning of the price system and of the modern business firm in a private enterprise, market-oriented economy. The relation of price, quantity, and profit under competition and imperfect competition.
3543. **Introduction to Econometrics** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair, and BUAD 3033.
 The application of statistical methods to economic and financial analysis; particular attention is given to regression analysis including limited and dichotomous dependent variables, regression diagnostics, hypothesis testing, analysis of variance, and selected topics in time series forecasting.
3553. **Economic Geography** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair, and 3 credit hours of economics.
 A study of global economic activity from the geographic and natural resource perspectives. Location economics will be used to analyze global resource allocation and development, technological change, environmental risks, and societal impacts, as well as to develop public policy alternatives.

- 3703. Money, Banking, and Monetary Policy** 3(3-0)
Prerequisite: Junior standing or above or consent of the chair.
An analysis of money, banking, and monetary policy, including an introduction to monetary theory. Topics include the use of balance sheet management techniques to control interest rate risk and increase profit in a dynamic banking environment.
- 3713. History of Economic Thought** 3(3-0)
Prerequisites: Junior standing or above or consent of the chair, and 3 credit hours of economics.
The significance, influence, and development of economic doctrines from ancient times to modern thought.
- 3743. Public Finance** 3(3-0)
Prerequisites: Junior standing or above or consent of the chair, ECON 2333, and ECON 2433.
A critical analysis of government acquisition and disbursement of revenues; detailed attention to the various taxing programs, the economic effects of governmental debt, and the significance of governmental expenditures for national defense, public works, social security benefits, resource development, and education.
- 4551, 4552, 4553. Independent Study in Economics** 1-3 semester hours
Prerequisite: Junior standing or above or consent of the chair.
May be repeated with different content.
- 4643. International Economics and Finance** 3(3-0)
Prerequisites: Junior standing or above or consent of the chair, ECON 2333, or ECON 2433.
International trade theory and practice, historical survey, balance of payments, and world economic problems.
- 4663. Special Topics in Economics** 3(3-0)
Topics vary. May be repeated with different content.
- 4723. Comparative Economic Systems** 3(3-0)
Prerequisites: Junior standing or above or consent of the chair, and 3 credit hours of economics.
Examination of economic characteristics and institutions related to economic freedom, growth, business enterprise, government planning, taxation expenditure, and transfer payments in the U.S., France, United Kingdom, Germany, and Japan.
- 4893. Internship in Economics** 3(3-0)
Prerequisite: See requirements under Internship Programs in Requirements for Majors in Business Administration, page 111.
Field experience in selected areas of business administration with local or regional organizations. May involve a specific project or theoretical integration with the “real world.” May be repeated once. Must be approved with all paperwork completed prior to registration. Total hours granted for internships in all areas of business administration may not exceed 6 hours of credit.

FINANCE

REQUIREMENTS FOR THE B.B.A. WITH A MAJOR IN FINANCE

General: (see page 89)

Academic Foundations and Core Curriculum: (see page 91)

Business Core: (see page 109)

Professional Business Core: (see page 109)

Courses for a Major in Finance: (30 semester hours)

FINC 3353, 4653, 4733, FINC 4753 or 4833, ECON 3543, 4643, plus twelve semester hours (four courses) selected from ECON 3323, 3333, 3703, 3743, FINC 3413, 3633, 3753, 4663, 4753 or 4833 (whichever course not taken above), 4893, and advanced accounting (limit six semester hours).

Students in the Student Managed Investment Fund will be able to complete the traditional Finance degree plan or complete the new Finance-Student Managed Investment Fund degree plan. For this option, the courses in the major are:

Courses for a Major in Finance (Student Managed Investment Fund option):

(30 semester hours)

FINC 3353, 4653, 4733, 4933, 4943, ECON 3543, and 4643, plus nine semester hours (three courses) selected from ECON 3323, 3333, 3703, 3743, FINC 3413, 3633, 3753, 4663, 4753, 4893, and advanced accounting (limit 6 semester hours).

Approved electives to bring total to 120 semester hours including exercise physiology requirements, if applicable.

Students pursuing a B.B.A. degree with a major in Finance must earn a grade of C or higher in FINC 3353, 3733, 4653, and 4733 taken at MSU or transferred from another college or university.

COURSES IN FINANCE (FINC)

3353. Financial Markets and Institutions 3(3-0)

Prerequisite: Junior standing or above or consent of the chair.

Characteristics, functions, and interaction of financial markets and institutions; current developments and trends; factors in interest rate determination.

3413. Principles of Real Estate 3(3-0)

Prerequisite: Junior standing or above or consent of the chair.

Interactions of legal considerations, financing requirements and alternatives, income and property tax considerations, governmental policies, and market conditions as determinants of real estate value.

3633. Financial Analysis 3(3-0)

Prerequisites: Junior standing or above or consent of the chair, ACCT 2143, ACCT 2243, and MATH 1203 or MATH 1233.

The study of financial tools and techniques used in the analysis of financial statements and other information for the purpose of deriving reasonable judgments about past, present, and future conditions of a firm and the effectiveness of its management. Dual listed with ACCT 3633.

3733. **Business Finance** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair, ACCT 2143, and ECON 2433.
 Introduction to the principles of financial management applied by domestic and international firms. Core topics include financial analysis, time value of money, risk and return, asset valuation, cost of capital and capital budgeting.
3753. **Risk Management and Insurance** 3(3-0)
 Prerequisite: Junior standing or above or consent of the chair.
 Identification, analysis, and management of risk through insurance and alternative tools. Topics include property and liability exposures, life, health, and loss of income exposures; use of insurance and non-insurance techniques to manage risk.
- 4551, 4552, 4553. **Independent Study in Finance** 1-3 semester hours
 Prerequisite: Junior standing or above or consent of the chair.
 May be repeated with different content.
4653. **Financial Management** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair ; BUAD 3033 and FINC 3733. Must earn a C or higher in FINC 3733.
 Advanced treatment of core topics from business finance and coverage of such additional topics as working capital management, capital structure and dividend decisions, cash flow estimation, risk analysis, and introduction to real options in capital budgeting.
4663. **Special Topics in Finance** 3(3-0)
 Topics vary. May be repeated with different content.
4733. **Investments** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair; BUAD 3033 and FINC 3733. Must earn a C or higher in FINC 3733.
 Characteristics and valuation of investment instruments including common stocks, bonds, and options; function and efficiency of securities markets; diversification and portfolio theory.
4753. **Advanced Issues in Corporate Finance** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair; FINC 4653. Must earn a C or higher in FINC 4653.
 Topics not covered in other corporate finance courses which may include, but are not limited to, capital budgeting, working capital management, and case studies in finance.
- 4833 **Security Analysis and Portfolio Management** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair; FINC 4733. Must earn a C or higher in FINC 4733.
 Security valuation and selection; theory and practice of portfolio management including asset allocation, diversification, and portfolio performance valuation.
4893. **Internship in Finance** 3(3-0)
 Prerequisites: See requirements under Internship Programs in Requirements for Majors in Business Administration, page 111.
 Field experience in finance with local or regional firms. Provides significant finance work experience involving training and supervision by an employer. The maintenance of a weekly log, a written report, and an employer evaluation are required. May be repeated once.

Must be approved with all paperwork completed prior to registration. Total hours granted for internships in all areas of business may not exceed six hours of credit.

4933. Student Managed Investment Fund I 3(3-0)

Prerequisites: Junior standing or above, consent of the instructor, and FINC 4733 with a grade of "B" or higher.

Security analysis and portfolio management in conjunction with the management of the Student Managed Investment Fund; security valuation and selection, asset allocation, diversification, and portfolio performance evaluation.

4943. Student Managed Investment Fund II 3(3-0)

Prerequisites: Junior standing or above, consent of the instructor, and FINC 4733 with a grade of "B" or higher. The course must be taken in a consecutive semester following FINC 4933 for a total of 6 credit hours. Students must have earned a grade of "C" or higher in FINC 4933.

Security analysis and portfolio management in conjunction with the management of the Student Managed Investment Fund; security valuation and selection, asset allocation, diversification, and portfolio performance evaluation.

GENERAL BUSINESS

REQUIREMENTS FOR THE B.B.A. WITH A MAJOR IN GENERAL BUSINESS

General: (see page 89)

Academic Foundations and Core Curriculum: (see page 91)

Business Core: (see page 109)

Professional Business Core: (see page 109)

Courses for Major in General Business (30 semester hours)

Selection of one course from each of the following lists:

ACCT 3003, 3023, 3033, 3043, 3073, 3203, 3633, 4063

ECON 3323, 3333, 3543, 3703

FINC 3353, 4653, 4733

MGMT 3783, 4033, 4113, 4213, 4513, 4613

MIS 3113, 3123, 3133, 3163, 3203, 3303, 4153

MKTG 3763, 3823, 4143, 4203, 4643, 4723, 4743, 4753

Plus LSBA 3243

And any three 3000-4000 level courses from the Dillard College.

Approved electives to bring total to 120 semester hours including exercise physiology requirements, if applicable.

REQUIREMENTS FOR THE B.B.A. WITH A MAJOR IN GENERAL BUSINESS AND TEACHING CERTIFICATION

Students seeking a major in general business and teaching certification should check with the West College of Education concerning specific requirements for teaching certification, and then the students should work closely with their respective advisors in the Colleges of Business Administration and Education. Program requirements for the B.B.A. with teaching certification will total 121 semester hours including exercise physiology requirements, if applicable. (See page 151.)

LEGAL STUDIES IN BUSINESS ADMINISTRATION

The Dillard College of Business Administration offers courses in legal studies in business administration.

COURSES IN LEGAL STUDIES IN BUSINESS ADMINISTRATION (LSBA)

3233. Legal Environment of Business 3(3-0)

Prerequisites: POLS 1333 and 1433 or consent of the instructor and junior standing or above or consent of the instructor.

An introduction to the procedures of the American legal system and how law operates in the business environment with international, economic, political, and social influences. Topics include legal and ethical responsibilities in organizations and society, legal process, alternative dispute resolution, legal and ethical decision making, international law, torts, contracts, and sales law. This course is beneficial for pre-law students.

3243. Commercial Law 3(3-0)

Prerequisites: POLS 1333 and 1433 or consent of the instructor and junior standing or above or consent of the instructor.

Agency, real property, bankruptcy, and Uniform Commercial Code Articles 2, 3, 4, and 7. This course is designed for students taking the CPA exam, business majors wanting a second course in law, and pre-law students. Students are strongly encouraged to take LSBA 3233 before taking this class.

**4551, 4552, 4553. Independent Study in Legal Studies in
Business Administration** 1-3 semester hours

Prerequisite: Junior standing or above or consent of the chair.
May be repeated with different content.

4663. Special Topics in Legal Studies in Business Administration 3(3-0)

Topics vary. May be repeated with different content.

4893. Internship in Legal Studies in Business Administration 3(3-0)

Prerequisite: See requirements under Internship Programs in Requirements for Majors in Business Administration, page 111.

Field experience in selected areas of business administration with local or regional organizations. May involve a specific project or theoretical integration with the “real world.” May be repeated once. Must be approved with all paperwork completed prior to registration. Total hours granted for internships in all areas of business administration may not exceed six hours of credit.



MANAGEMENT and MARKETING

Chris Shao, Chair (Dillard College of Business Administration Building 272)

Professors: Dubinsky, Patterson

Associate Professors: Bultena, Shao, Wilson

Assistant Professors: Martin, Stambaugh

Executive in Residence – Management: Forrester

Professors Emeriti: Boutwell, Harvey, McCullough,
McWhorter, Moeller, Ramser, Rountree

MANAGEMENT

REQUIREMENTS FOR THE B.B.A. WITH A MAJOR IN MANAGEMENT

General: (see page 89)

Academic Foundations and Core Curriculum: (see page 91)

Business Core: (see page 109)

Professional Business Core: (see page 109)

Courses for Major in Management: (27 semester hours)

MGMT 3783, 4033, 4113, 4213, and 4613; plus twelve hours from the following:
MGMT 4413, 4513, 4663, 4783, 4793, 4893, LSBA 3243, BUAD 4993, ECON
3703 or 4643, MIS 3163, or one from MKTG 3763, 4303, 4643, or 4723.

Approved electives to bring total to 120 semester hours including exercise physiology requirements, if applicable.

REQUIREMENTS FOR MINOR IN ENTREPRENEURSHIP (18 semester hours)

ACCT 2143 Financial Accounting

MKTG 3723 Principles of Marketing

MGMT 3013 Organizational Behavior

MGMT 3783 Entrepreneurship and Management of Small Enterprises

Choose two from:

MGMT 4553 Independent Study in Management (Entrepreneurship)

MGMT 4783 Entrepreneurial Planning

MGMT 4793 Entrepreneurial Consulting

MGMT 4893 Internship in Management

Note: Students pursuing a B.B.A. degree need substitutions for some of the courses above, depending on major. Please see Dillard College of Business Administration advisor for appropriate substitutions.

COURSES IN MANAGEMENT (MGMT)

3013. Organizational Behavior in Business

3(3-0)

Prerequisite: Junior standing or above or consent of the chair.

A study of the behavior of people at work in all forms of organizations. Topics to be covered include the fundamentals both of organizations and of organizational behavior, including individual differences, attitudes, values, ethics, motivation, group dynamics, decision-making, conflict, power, change, stress, leadership, job design, and organization structure. Also includes the development of management theory, as well as international and technological management, and self-assessment.

3453. **Operations Management** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair, MATH 1203 or MATH 1233.
 Study of concepts, issues, and techniques for systems of production. Development of a basic understanding of the manufacturing function in industry.
3783. **Entrepreneurship and Management of Small Enterprises** 3(3-0)
 Prerequisite: Junior standing or above or consent of the chair.
 Focus on the principles and problems associated with starting and managing small enterprises. Students gain an understanding of forms of ownership, sources of funds, location analysis, facility requirements, and business plans.
4033. **Quantitative Methods** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair, and BUAD 3033 or equivalent.
 Methods and application of operations research including such topics as linear programming, waiting line theory, PERT, networks, transportation, assignment, dynamic and goal programming.
4113. **Leadership** 3(3-0)
 Prerequisites: MGMT 3013 and junior standing or above or consent of the chair.
 Course focuses on the leadership challenges in organizations. Key learning outcomes in this course include current perspectives on the key elements of effective leadership, the fundamental elements and best practices in the area of organizational change, using the concepts of leadership and change to analyze organizational change situations.
4213. **Human Resource Management** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair, and MGMT 3013.
 Personnel and human resource policies and practices related to procuring and training employees, development, careers, job analysis, basic compensation, equal opportunity, and fairness. Also looks at human resource philosophy and the national/international arena.
4413. **Human Resource Perspectives** 3(3-0)
 Prerequisite: Senior standing in business administration or consent of the chair.
 Human resource policies and practices relating to benefits, performance appraisal, rewards, motivation, communications, labor relations, and health and safety. Problem solving, applications orientation with emphasis on a human resource manager's job.
4513. **Employment Relations** 3(3-0)
 Prerequisite: Senior standing in business administration or consent of the chair.
 An experiential study of human relations in varied employment settings, with special emphasis on communications, self-esteem, ethics, motivation, trust, emotional balance, professionalism, team building, conflict, labor-management relations, dispute resolution, and diversity. Extensive use of case analysis, incident-techniques, and panel discussions.
- 4551, 4552, 4553. **Independent Study in Management** 1-3 semester hours
 Prerequisites: Junior standing or above or consent of the chair.
 Maybe be repeated with different content.
4613. **Supervisory Management** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair, and MGMT 3013.
 A study of the art of working with and through people as a manager or team leader.

Topics include coverage of management functions such as leading, planning, decision making, organizing, delegating, managing change, managing stress, and managing time. Historical, ethical, and international dimensions will be considered.

4663. Special Topics in Management 3(3-0)
Topics vary. May be repeated with different content.

4783. Entrepreneurial Planning 3(3-0)
Prerequisites: MGMT 3783, MKTG 3723, FINC 3733, and consent of Director, Munir Abdul Lalani Center for Entrepreneurship and Free Enterprise.

Advanced study of entrepreneurship where students work singly or in teams to learn and apply business planning and venture creation skills. Requires the development and presentation of a detailed business plan as the culminating point of the course.

4793. Entrepreneurial Consulting 3(3-0)
Prerequisites: MGMT 3783, MKTG 3723, FINC 3733, and consent of Director, Munir Abdul Lalani Center for Entrepreneurship and Free Enterprise.

A course where student teams consult with local small businesses recommended by the Small Business Development Center. Students conduct analysis and provide a series of deliverables that enable a business to operate more efficiently and grow. Students learn and employ a systemic approach to business consulting.

4853. Strategic Management 3(3-0)
Prerequisite: Graduating senior in business administration or consent of the chair.

Formulation and implementation of top-level managerial strategy. Topics include internal/external analysis; business, corporate, and international strategy; competitive dynamics, acquisition/restructuring, strategic leadership, and innovation. Students apply course concepts by developing a strategic case analysis and by participating in a computer business simulation.

4893. Internship in Management 3(3-0)
Prerequisites: See requirements under Internship Programs in Requirements for Majors in Business Administration, page 111.

Field experience in selected areas of business administration with local or regional organizations. May involve a specific project or theoretical integration with the "real world." May be repeated once. Must be approved with all paperwork completed prior to registration. Total hours granted for internships in all areas of business administration may not exceed six hours of credit.

MARKETING

REQUIREMENTS FOR THE B.B.A. WITH A MAJOR IN MARKETING

General: (see page 89)

Academic Foundations and Core Curriculum: (see page 91)

Business Core: (see page 109)

Professional Business Core: (see page 109)

Courses for Major in Marketing (27 semester hours)

MKTG 3763, 3823, 4143, 4643, 4753; two of the following courses (one of which must be MKTG 4203 or 4723): MKTG 4203, 4223, 4303, 4663, 4723, 4743, 4893, MGMT 3783, or MIS 3203; three hours from any advanced course from the Dillard

College of Business Administration; and three hours from any advanced course in any other college.

Approved electives to bring total to 120 semester hours including exercise physiology requirements, if applicable.

COURSES IN MARKETING (MKTG)

- 3723. Principles of Marketing** 3(3-0)
Prerequisites: Junior standing or above or consent of the chair, and ECON 2433 or equivalent.
A description and analysis of business activities designed to plan, price, promote, and distribute products and services to customers. Topics include the marketing environment, consumer behavior, marketing channels, governmental regulations, advertising, and current marketing practices.
- 3763. Professional Selling** 3(3-0)
Prerequisites: Junior standing or above or consent of the chair, and MKTG 3723.
Professional selling principles and relationship practices for business. Includes principles of communication and listening, identifying customer needs, creating value, adapting communication style, communicating the offer, overcoming resistance, closing, and follow-up.
- 3823. Consumer Behavior** 3(3-0)
Prerequisites: Junior standing or above or consent of the chair, and MKTG 3723.
An exploration of research pertaining to the consumer, and an assessment of the marketing implications of the various processes and facets of consumer behavior, motivation, and decisions.
- 4143. Marketing Research** 3(3-0)
Prerequisites: Junior standing or above or consent of the chair, BUAD 3033, and MKTG 3723.
Emphasizes the importance and use of marketing research in U.S. businesses. Includes a detailed analysis of the research process from formulating of the problem to the preparing the research report. Each student will complete a research project.
- 4203. Promotion Management** 3(3-0)
Prerequisites: Junior standing or above or consent of the chair, and MKTG 3723.
An overview of promotion, including program selection, media selection, and advertising effectiveness and coordination of the advertising function with the other promotional tools.
- 4223. Retailing** 3(3-0)
Prerequisites: Junior standing or above or consent of the chair, and MKTG 3723.
Philosophy and techniques of modern retail merchandising; including store location, traffic studies, store layouts and arrangements, store organization, merchandising budget system, and store policies.
- 4303. Sales Management** 3(3-0)
Prerequisites: Junior standing or above or consent of the chair, and MKTG 3723.
Basics of first-level management in a sales setting. Topics include the boundary spanning role, strategic programs, planning, organizing, staffing, directing and controlling the sales and sales force operation.

- 4551, 4552, 4553. **Independent Study in Marketing** 1-3 semester hours
 Prerequisite: Junior standing or above or consent of the chair.
 May be repeated with different content.
4643. **International Marketing** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair, and MKTG 3723.
 A survey of international marketing, world markets, political restraints in trade, and international marketing practices.
4663. **Special Topics in Marketing** 3(3-0)
 Topics vary. May be repeated with different content.
4723. **Services Marketing** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair, and MKTG 3723.
 An understanding of the unique characteristics of services, the marketing challenges created by these characteristics, the marketing tools to deal with these challenges, and the strategic issues of utilizing these marketing tools.
4743. **Marketing Projects** 3(3-0)
 Prerequisites: Junior standing or above or consent of the chair; MKTG 3723.
 The utilization of real projects in solving problems in the areas of marketing.
4753. **Marketing Strategy** 3(3-0)
 Prerequisites: 12 semester hours of marketing coursework including MKTG 3723 or consent of the instructor and chair.
 The utilization of qualitative and quantitative models to analyze various marketing functional areas as well as oral and written cases in solving strategic and managerial marketing problems.
4893. **Internship in Marketing** 3(3-0)
 Prerequisites: See requirements under Internship Programs in Requirements for Majors in Business Administration, page 111.
 Field experience in selected areas of marketing with local or regional businesses. May be repeated once. Must be approved with all paperwork completed prior to registration. Total hours granted for internships in all areas of business administration may not exceed six hours of credit.

DILLARD COLLEGE CENTERS

Bureau of Business and Government Research

John Martinez, Ph.D.
 Director

The Bureau of Business and Government Research is an integral part of the Dillard College of Business Administration and Midwestern State University. The mission of the Bureau of Business and Government Research is

1. to provide assistance in research conducted by the faculty and students in the University;
2. to conduct and encourage research related to economic development and the local community; and

3. to promote partnerships in the business and local community to pursue contemporary economic, business, and government issues.

The Bureau of Business and Government Research at Midwestern State University is a member of the nationwide Association for University Business and Economic Research. The Bureau of Business and Government Research publishes the Midwestern Business and Economic Review twice yearly.

The Mamie Raborn Center for Economic Education

James Owen, Ph.D.
Director

The Mamie Raborn Center for Economic Education was established in 1982 to increase the economic understanding of the University community and the citizens of the North Texas area. The Center provides economic education materials, disperses information concerning economic issues, and serves as a point of contact for members of the media and community having questions about economic issues.

Small Business Development Center

Vanda Wright
Director

The MSU Small Business Development Center provides assistance to small businesses. Clients include those already in business and those who want to start a new enterprise. The Center provides business and technical advice in one-on-one counseling. Special seminars and workshops are developed and presented as needed. Assistance in international trade, government contracting, and technology transfer is also offered.

The Small Business Development Center works with the Dillard College of Business Administration in developing cooperative research with faculty members.

The Center for Management and Leadership Development

Jim Lundy, Ph.D.
Director

The Center for Management and Leadership Development is committed to guiding managers and leaders at all levels of responsibility to respect, involve, and guide their associates to embrace the progressive pursuit of individual responsibility and accountability. The challenges of leadership and teamwork exist in all groups – for profit, not-for-profit, governmental or private. Through consultations, workshops, lectures, and other services, the Center for Management and Leadership Development strives to enhance the abilities of individuals and groups to provide their customers, clients, and constituents with outstanding leadership and management competencies.

The Munir Abdul Lalani Center for Entrepreneurship and Free Enterprise

Jeffrey E. Stambaugh, Ph.D.
Director

The Munir Abdul Lalani Center for Entrepreneurship and Free Enterprise was established by the family of Munir Lalani to support entrepreneurial ventures, creativity, innovation, and curriculum for students at Midwestern State University. The Lalani Center works with individual students as well as members of the North Texas community in support of new business start-ups and other entrepreneurial activities, business incubators, and partnerships with the Chamber of Commerce and Industry in the Wichita Falls region. The Lalani Center is developing curriculum in entrepreneurship to encourage and support successful student innovation and economic development. The business incubator program helps accelerate new business ventures, assists in business plan development, venture capital development, and participation in national student competitions. The Lalani Center is a member of the National Business Incubator Association.

BRIDWELL DISTINGUISHED PROFESSORSHIP OF FINANCE

The Bridwell Distinguished Professorship of Finance was established in 1990 by the Bridwell Foundation to bring outstanding scholarship to Midwestern State University. The professor holding this position is recognized in the finance profession for his academic achievements.

Dr. Roy P. Patin, Jr., the Bridwell Distinguished Professor of Finance, came to Midwestern State University in 1992 from McNeese State University. Dr. Patin has written numerous articles and has served as a finance consultant. He has work experience with Exxon Oil Company and Dow Chemical Company. He has held administrative positions in higher education and has taught at McNeese State University, Clemson University, and Mississippi State University.

DILLARD DISTINGUISHED PROFESSORSHIP OF MARKETING

The Dillard Distinguished Professorship of Marketing was established in 2010 to honor Ms. Kay Dillard, a primary benefactor of the Dillard College of Business Administration. The professor holding this position is recognized nationally in the marketing profession for his outstanding contributions to the marketing field.

Alan Dubinsky (Ph.D., University of Minnesota) has been named the first Dillard Distinguished Professor of Marketing. He has taught at several universities, including Purdue University, SMU, University of Missouri, and University of Kentucky. Prior to entering academia, he was a territory manager for Burroughs Corporation (now Unisys). His research has appeared in the Journal of Marketing, Journal of Marketing Research, Journal of Applied Psychology, Personnel Psychology, Academy of Management Journal, Leadership Quarterly, and Sloan Management Review, among others, and he is the author of four books. He is a

former editor of the Journal of Personal Selling and Sales Management and a recipient of the Annual Excellence in Research Award from the American Marketing Association Selling and Sales Management Special Interest Group.

LOUIS J. AND RAMONA RODRIGUEZ DISTINGUISHED PROFESSORSHIP

The Louis J. and Ramona Rodriguez Distinguished Professorship was established in 2003 to honor President Emeritus Louis J. and Ramona Rodriguez.

MUNIR A. LALANI DISTINGUISHED PROFESSORSHIP OF ENTREPRENEURSHIP

The Munir A. Lalani Distinguished Professor of Entrepreneurship was established in 2008 by the family of Munir Lalani to support entrepreneurial activities in the Dillard College and region.

Dr. Jeffrey E. Stambaugh, the Munir A. Lalani Distinguished Professor of Entrepreneurship, is a retired Colonel from the United States Air Force where he has a distinguished career as an officer and fighter pilot. He graduated from the U.S. Air Force Academy and has served as the 27th Fighter Wing Vice Commander in Clovis, NM. He has twice been assigned to the Pentagon and served as a political-military affairs officer at U.S. European Command Headquarters in Germany. In 2001, he was a Fellow at the Weatherhead Center for International Affairs at Harvard University. Dr. Stambaugh completed his Ph.D. in Management with a specialization in entrepreneurship and strategies from Texas Tech University. He serves as the Director of the Munir Abdul Lalani Center for Entrepreneurship and Free Enterprise in the Dillard College of Business Administration.

ROBERT MADERA DISTINGUISHED PROFESSORSHIP OF ACCOUNTING

The Robert Madera Distinguished Professorship of Accounting was established in 2005 in recognition of the long-time service of Professor Emeritus, Robert Madera. The generosity of alumni of the Dillard College of Business Administration has made this professorship possible.

Terry Patton, Ph.D., CPA, CGFM, is the Robert Madera Distinguished Professor of Accounting and the Dean of the Dillard College of Business Administration at Midwestern State University. He is the author of numerous articles on governmental accounting and co-author of a textbook, *Introduction to Governmental and Not-for-Profit Accounting*, 7th edition, published by Prentice Hall. He also was co-author on PPC's *Guide to Governmental Financial Reporting Model: Implementing GASBS No. 34*. Previously, Dr. Patton was the Research Manager at the Governmental Accounting Standards Board (GASB). In his eight years at the GASB, he was part of the project team on numerous GASB Standards including major projects such as GASB Statement No. 34, *Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments* and GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. Dr. Patton also has been an Assistant Professor of Accounting at the University of Wisconsin-Oshkosh and a supervisor at a Texas CPA firm where he conducted audits of local governments. Dr. Patton received his doctorate in accounting from Texas Tech University. He is a member of the American Accounting Association and the American Institute of Certified Public Accountants.

GORDON T. AND ELLEN WEST COLLEGE OF EDUCATION

Matthew Capps, Dean (Ferguson Hall 201A)

EDUCATION

Vacant, Chair – Curriculum and Learning

Michaelle Kitchen, Chair – Counseling, Kinesiology, and Special Education

Vacant, Chair - Educational Leadership and Technology

Professors: Coe, Gore

Associate Professors: Andersen, Burger, M. Capps, Kitchen, Owen

Assistant Professors: Beechler, Blacklock, Hammer, Huang, Lilienthal,

Lindt, Miller, Mohr, Schreiber, Schultz, Stewart, Wood

Instructors: Curry, Shawver, Wines

Certification Officer: Darter

Professors Emeriti: E. Capps, Darter, Dowd, Estrada, Furr,

Land, Menard, Newton, Redmon, Simpson, Smith

MISSION STATEMENT FOR THE GORDON T. AND ELLEN WEST COLLEGE OF EDUCATION

The mission of the Gordon T. and Ellen West College of Education, a community of learners, is to prepare successful, reflective professionals through the use of best practices.

Philosophy

The West College of Education believes that learning changes both the individual and society. Developing resiliency and tolerance enhances an individual's potential. The individual becomes a critical thinker and an effective problem solver. Individuals with a cause beyond self contribute to an informed, democratic, and synergistic society. We will establish a reflective and collaborative community to enhance the potential of both the learner and society.

Programs

The undergraduate teacher certification program of the West College of Education functions within a Center for the Professional Development of Teachers (CPDT). The CPDT consists of the Gordon T. and Ellen West College of Education and cooperating public schools. All professional education courses, and most reading courses, are taught as field-based courses in classrooms dedicated to our teacher education program in those professional development schools.

The Gordon T. and Ellen West College of Education offers teacher certification for elementary, secondary, all-level teachers, and a B.A. and B.S. in Sport and Leisure Studies. Students who wish to become elementary teachers (Early Childhood - Grade 6; Grades 4-8) graduate with a Bachelor of Science in Interdisciplinary Studies (BSIS). Students who wish to become secondary teachers (Grades 8-12) or all-level teachers (Grades K-12) pursue a Bachelor of Science, Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, or Bachelor of Business Administration with a major and/or minor in appropriate teaching fields.

The program requirements listed are those in effect at the time this catalog was published. Changes may be mandated by the Texas Higher Education Coordinating Board (THECB), Texas Education Agency, or Midwestern State University Teacher Education Committee (MSU-TEC). Students should contact the West College of Education for information regarding program changes.

Students already holding a bachelor's degree who wish to seek teacher certification should contact the Certification Officer, Ferguson Hall 214, for an assessment of their degree and specific program requirements.

Summary Information of Teacher Candidates

The teacher education preparation program is accredited by the Texas Education Agency. The following demographic data present the pass rate of the ExCET for those completing the initial teacher education program between September 1, 2010, and August 31, 2011.

Overall pass rate:

<u>Total</u>	<u>Female</u>	<u>Male</u>
96% (145)	96% (123)	94% (22)

Numbers in parenthesis represent number passing the test.

Admission to the Teacher Certification Program: The Teacher Education Committee expects all teacher education students to be above average scholars; therefore, to be considered for admission to the Teacher Certification program, the applicant must have

1. an application on file (forms available in Education Office);
2. three letters of recommendation (forms available in Education Office);
3. satisfactory scores on the Texas Higher Education Assessment (THEA), or equivalent, in reading, writing, and mathematics;
4. at least 60 semester hours of credit;
5. a cumulative grade point of 2.75; and
6. a grade point of 2.5 in freshman English (excluding any developmental courses).

When the above steps have been successfully completed, the student's application to the teacher education program is submitted to the Teacher Education Committee. The Teacher Education Committee has the authority to accept or reject an applicant to teacher certification based on the applicant's file and other relevant information. Admission to the Teacher Education Program is highly selective. Should limitations on resources require restrictions to be placed on the number of students admitted in a given semester or year, the Teacher Education Committee will admit students according to the level of distinction achieved.

All students must satisfy the basic skills testing requirement (Texas Higher Education Assessment test) and have 60 semester credit hours prior to enrolling in any professional education course (EDUC 3153, 3162, 4102, 4202, 4302, 4106, 4113, 4166, 4173, 4176, 4263, 4466, 4473, READ 4203, 4213, 4223, 4273, SPED 3613). Students should complete all requirements and file for admission by the time they have completed 60 hours of credit. Students having 60 hours of credit and having met the THEA requirement but who have not been admitted to the program are limited to taking 6 semester hours of professional education.

Undergraduate students seeking teacher certification shall have their official advisor appointed by the Dean of the West College of Education. The Certification Officer will advise post-baccalaureate candidates.

Admission to Student Teaching. Students should make application for student teaching by October 1 for the spring semester and by February 15 for the fall semester. Consideration for admission requires a 2.6 grade point average (programs in the Prothro-Yeager College of Humanities and Social Sciences require a 2.75**) and the dean's approval in professional education and each teaching field. A grade of "D" in a course required for certification cannot be used in a student's teaching field, major, minor, or professional education courses. Students may be required to pass qualifying exams in their respective colleges prior to being admitted to student teaching. Thirty-five hours of field experiences, with at least one-half at the appropriate teaching level, must be completed before student teaching begins. Complete applications are approved by the Teacher Education Committee. Fall applications may not be approved until August if the student has summer courses to complete.

All students receive a speech/language diagnostic assessment as part of their course work. If there are areas for remediation and correction, speech/language therapy is provided for students as a professional service. Admission into student teaching is contingent upon completion of the recommended corrective steps. Proper speech and language are professional competencies and expectations. Having these services available for education students should be viewed as a tangible benefit of attending MSU.

Student teachers seeking elementary certification must have completed Education 2013, 3153, 3162, 4102, 4202, 4302, Reading 4203, 4213, 4223, and Special Education 3613, prior to student teaching.

Student teachers seeking secondary certification must have completed Reading 4273, Education 2013, 3153, 3162, 4113, and SPED 3613 prior to student teaching.

Student teaching will be full days for 12 weeks.

**Teaching fields in the Prothro-Yeager College of Humanities and Social Sciences include Composite Social Studies, English/Language Arts and Reading, French, and Spanish.

Fitness for the Teaching Profession. Students who are admitted to teacher education are expected to meet specified non-academic standards that are necessary to be competent teachers. The intent is to ensure that the students recommended for teacher certification are able to effectively and independently carry out the duties for which they are being prepared. The fitness criteria include personality characteristics, responsibility characteristics, communication skills, social relationships, and commitment to the teaching profession. Students who have been identified with a demonstrable discrepancy by two or more professors or cooperating teachers will meet with the Faculty Review Committee to discuss options and develop a growth plan. The Faculty Review Committee consists of three faculty members in the West College of Education appointed by the dean. Failure to make satisfactory progress on the growth plan may result in denied admission to student teaching or removal from the program.

Recommendation for Certification. University recommendation for teacher certification will require completion of the approved program, satisfactory scores on the state competency examinations (TExES), and approval by the Teacher Education Committee. Recommendation for certification will not be made for a student receiving a grade below "C" in student teaching. Certification requires successful scores on the TExES and an application fee set by the State Board for Educator Certification. Application for certification is made by applying online at the website for the State Board for Education Certification (<http://www.sbec.state.tx.us>). The Certification Assistant in the Education Office can provide detailed instructions on applying online.

Upon receipt of the University recommendation, the State Board for Educator Certification screens all applicants for Texas certificates for a record of felony or misdemeanor conviction through the Texas Department of Public Safety. In accordance with Article 6252-13c, Texas Civil Statutes, the Commissioner of Education may suspend or revoke a teaching certificate, or refuse to issue a teaching certificate for a person who has been convicted of a felony or misdemeanor crime which directly relates to the duties and responsibilities of the teaching profession.

Bachelor of Science in Interdisciplinary Studies (BSIS)

Elementary/Middle School Certification

The BSIS is designed for initial certification of elementary and middle school teachers. The degree program includes two levels of certification, Early Childhood - Grade 6 and Grades 4-8.

Early Childhood Through Grade 6 (EC-6)

Academic Foundations and Core Curriculum 46 hours

ENGL	1113, 1123	Rhetoric and Composition	6
SPAN	1134, 1234	Elementary Spanish	8
GNSC	1104, 1204	Life/Earth Science and Physical Science	8
HIST	1133, 1233	Survey of American History	6
POLS	1333, 1433	American Government	6
MATH	1233	College Algebra	3
SPCH	1133, 1233, or 2423	Fundamentals of Speech, Voice and Diction, or Interpersonal Communication	3
ART	4303	Foundations of Art I	3
Choose	3 hours from the following courses:		3
	PSYC	1103 General Psychology	
	SOCL	1133 Introduction to Sociology	
	ECON	1333 General Economics	
	ECON	2333 Macroeconomics	
	ECON	2433 Microeconomics	

Teaching Field 60 hours

ART	4303*	Foundations of Art I	3
ECED	3103	Introduction to Young Children	3
ECED	3173	ESL Methods and Materials	3
ECED	4123	Early Childhood Development: Language and Literacy	3
ECED	4133	Early Childhood Curriculum	3
GNSC	1104*, 1204*	Life/Earth Science and Physical Science	8
GNSC	3104	Concepts of Science (or any 4 hour lab science)	4
HIST	1133*, 1233*	Survey of American History	6
KNES	1213	Concepts of Healthy Living	3
MATH	1233*	College Algebra	3
MATH	2033, 2043	Structure of the Number System I and II	6
MUSC	3813	Foundations of Music I	3
POLS	1333*, 1433*	American Government	6

READ 3013	Child and Adolescent Literature	3
SPCH 1133, 1233, or 2423*	Fundamentals of Speech, Voice and Diction, or Interpersonal Communication	3

*29 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Other Requirements **14 hours**

COUN 2023	Human Development	3
EDUC 1023	or computer proficiency demonstrated through department exam.	3
EDUC 2013	School and Society	3
ENGL	Sophomore literature	3
KNES 2102	Movement Activities for Children	2

Professional Education and Reading Blocks **29 hours**

Block 1: Student must have passed THEA or equivalent and 60 semester hours.

EDUC 3153	Educational Psychology	3
SPED 3613	Exceptional Individuals	3

Block 2: Student must be admitted to the Teacher Education Program before enrolling.

EDUC 3162	Classroom Management	2
EDUC 4102	Teaching Science in Elementary School	2
EDUC 4202	Teaching Math in Elementary School	2
EDUC 4302	Teaching Social Studies in Elementary School	2

Block 3: Student must have finished Blocks 1 and 2 before taking the following courses.

READ 4203	Developmental Reading	3
READ 4213	Methods of Teaching Reading and the Language Arts	3

Concurrent or after Block 3:

READ 4223	Diagnosis and Correction of Reading Difficulties	3
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To be taken in last semester:

EDUC 4166	Student Teaching	6
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Total semester hours **120**

Bachelor of Science in Interdisciplinary Studies Grade 4 Through Grade 8

The West College of Education offers the following four teaching fields for grades 4-8 certification: English/Language Arts and Reading, Mathematics, Science, and Social Studies.

English Language Arts and Reading (4-8 Certificate)

Academic Foundations and Core Curriculum **46 hours**

ENGL 1113, 1123	Rhetoric and Composition	6
SPAN 1134, 1234	Elementary Spanish	8

GNSC 1104, 1204	Life/Earth Science and Physical Science	8
HIST 1133, 1233	Survey of American History	6
POLS 1333, 1433	American Government	6
MATH 1233	College Algebra	3
SPCH 1133, 1233, or 2423	Fundamentals of Speech, Voice and Diction, or Interpersonal Communication	3
ART 1413 or MUSC 1033	Art or Music Appreciation	3
Choose 3 hours from the following courses:		3
PSYC 1103	General Psychology	
SOCL 1133	Introduction to Sociology	
ECON 1333	General Economics	
ECON 2333	Macroeconomics	
ECON 2433	Microeconomics	

Teaching Field (Major) 30 hours

ENGL 1113*, 1123*	Rhetoric and Composition	6
ENGL	Sophomore literature	6
ENGL 3503	Advanced Survey of Literature	3
ENGL 3513	Advanced Grammar	3
ENGL 4013	Introduction to Composition Studies	3
Advanced English (3000 or 4000 level)		6
READ 3013	Child and Adolescent Literature	3

*6 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Other Requirements 21 hours

COUN 2023	Human Development	3
EDUC 1023	or computer proficiency demonstrated through department exam.	3
EDUC 2013	School and Society	3
GNSC 3104	Concepts of Science or any 4 hour lab science	4
KNES 2102	Movement Activities for Children	2
MATH 2033 and 2043	Structure of the Number System I and II	6

Professional Education and Reading Blocks 29 hours

Block 1: Student must have passed THEA or equivalent and 60 semester hours.

EDUC 3153	Educational Psychology	3
SPED 3613	Exceptional Individuals	3

Block 2: Student must be admitted to the Teacher Education Program before enrolling.

EDUC 3162	Classroom Management	2
EDUC 4102	Teaching Science in Elementary School	2
EDUC 4202	Teaching Math in Elementary School	2
EDUC 4302	Teaching Social Studies in Elementary School	2

Block 3: Student must have finished Blocks 1 and 2 before taking the following courses.

READ 4203	Developmental Reading	3
READ 4213	Methods of Teaching Reading and the Language Arts	3

Concurrent or after Block 3:

READ 4223	Diagnosis and Correction of Reading Difficulties	3
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To be taken in last semester:

EDUC 4166	Student Teaching	6
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Total Semester Hours		120
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**Mathematics
(4-8 Certificate)**

Academic Foundations and Core Curriculum	46 hours
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ENGL 1113, 1123	Rhetoric and Composition	6
SPAN 1134, 1234	Elementary Spanish	8
GNSC 1104, 1204	Life/Earth Science and Physical Science	8
HIST 1133, 1233	Survey of American History	6
POLS 1333, 1433	American Government	6
MATH 1233	College Algebra	3
SPCH 1133, 1233, or 2423	Fundamentals of Speech, Voice and Diction, or Interpersonal Communication	3
ART 1413 or MUSC 1033	Art or Music Appreciation	3
PSYC 1103 or SOCL 1133	General Psychology or Introductory to Sociology	3

Teaching Field (Major)	24 hours
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MATH 1233*	College Algebra	3
MATH 2033, 2043	Structure of Number System I and II	6
MATH 3033	Modeling	3
MATH 3113	Techniques in Problem Solving	3
MATH 3123	Concepts of Geometry	3
MATH 4033	Foundations of Discrete Math	3
STAT 3573	Probability and Statistics	3

*3 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Other Requirements	24 hours
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COUN 2023	Human Development	3
ECON 1333 or 2333	General Economics or Macroeconomics	3
EDUC 1023	or computer proficiency demonstrated through department exam.	3
EDUC 2013	School and Society	3
GEOG 3003 or 3013	Geography of the World or Geography of North America	3
GNSC 3104	Concepts of Science or any 4 hour lab science	4
KNES 2102	Movement Activities for Children	2
READ 3013	Child and Adolescent Literature	3

Professional Education and Reading Blocks **29 hours**

Block 1: Student must have passed THEA or equivalent and 60 semester hours.

EDUC 3153	Educational Psychology	3
SPED 3613	Exceptional Individuals	3

Block 2: Student must be admitted to the Teacher Education Program before enrolling.

EDUC 3162	Classroom Management	2
EDUC 4102	Teaching Science in Elementary School	2
EDUC 4202	Teaching Math in Elementary School	2
EDUC 4302	Teaching Social Studies in Elementary School	2

Block 3: Student must have finished Blocks 1 and 2 before taking the following courses.

READ 4203	Developmental Reading	3
READ 4213	Methods of Teaching Reading and the Language Arts	3

Concurrent or after Block 3:

READ 4273	Content Reading	3
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To be taken in last semester:

EDUC 4166	Student Teaching	6
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Total semester hours **120**

**Science
(4-8 Certificate)**

Academic Foundations and Core Curriculum **46 hours**

ENGL 1113, 1123	Rhetoric and Composition	6
SPAN 1134, 1234	Elementary Spanish	8
GEOS 1134	Physical Geology	4
GNSC 1204	Physical Science	4
HIST 1133, 1233	Survey of American History	6
POLS 1333, 1433	American Government	6
MATH 1233	College Algebra	3
SPCH 1133, 1233, or 2423	Fundamentals of Speech, Voice and Diction, or Interpersonal Communication	3
ART 1413 or MUSC 1033	Art or Music Appreciation	3
Choose 3 hours from the following courses:		3
PSYC 1103	General Psychology	
SOCL 1133	Introduction to Sociology	
ECON 1333	General Economics	
ECON 2333	Macroeconomics	
ECON 2433	Microeconomics	

Teaching Field (Major) **34 hours**

BIOL 3434 or 3534	Entomology or Systematic Botany	4
CHEM 1103	Introductory Chemistry	3
GEOS 1134*	Physical Geology	4

GEOS 3034	Oceanography	4
GNSC 1204*	Physical Science	4
GNSC 3104	Concepts of Science	4
PHYS 1533	Descriptive Astronomy	3
Choose 2 courses from:		8
BIOL 1144	General Zoology	
BIOL 1544	General Botany	
ENSC 1114	Foundations of Environmental Science	
GEOS 1234	Historical Geology	

*8 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Other Requirements **20 hours**

COUN 2023	Human Development	3
EDUC 1023	or computer proficiency demonstrated through department exam.	3
EDUC 2013	School and Society	3
KNES 2102	Movement Activities for Children	2
MATH 2033	and 2043 Structure of the Number System I and II	6
READ 3013	Child and Adolescent Literature	3

Professional Education and Reading Blocks **29 hours**

Block 1: Student must have passed THEA or equivalent and 60 semester hours.

EDUC 3153	Educational Psychology	3
SPED 3613	Exceptional Individuals	3

Block 2: Student must be admitted to the Teacher Education Program before enrolling.

EDUC 3162	Classroom Management	2
EDUC 4102	Teaching Science in Elementary School	2
EDUC 4202	Teaching Math in Elementary School	2
EDUC 4302	Teaching Social Studies in Elementary School	2

Block 3: Student must have finished Blocks 1 and 2 before taking the following courses.

READ 4203	Developmental Reading	3
READ 4213	Methods of Teaching Reading and the Language Arts	3

Concurrent or after Block 3:

READ 4273	Content Reading	3
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To be taken in last semester:

EDUC 4166	Student Teaching	6
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Total Semester Hours **121**

**Social Studies
(4-8 Certificate)**

Academic Foundations and Core Curriculum **46 hours**

ENGL 1113, 1123	Rhetoric and Composition	6
SPAN 1134, 1234	Elementary Spanish	8

GNSC	1104, 1204	Life/Earth Science and Physical Science	8
HIST	1133, 1233	Survey of American History	6
POLS	1333, 1433	American Government	6
MATH	1233	College Algebra	3
SPCH	1133, 1233, or 2423	Fundamentals of Speech, Voice and Diction, or Interpersonal Communication	3
ART	1413 or MUSC 1033	Art or Music Appreciation	3
ECON	1333	General Economics	3

Teaching Field (Major) 36 hours

ECON	1333*	General Economics	3
GEOG	3003	Geography of the World	3
GEOG	3013	Geography of North America	3
HIST	1133*, 1233*	Survey of American History	6
HIST	1333	Survey of Western Civilization	3
HIST	1433	Survey of Western Civilization	3
HIST	3003	Survey of Texas History	3
HIST	3133	Comparative World Religions and Cultures	3
POLS	1333*, 1433*	American Government	6
SOST	3003	Concepts of Social Studies	3

*15 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Other Requirements 24 hours

COUN	2023	Human Development	3
EDUC	1023	or computer proficiency demonstrated through department exam.	3
EDUC	2013	School and Society	3
GNSC	3104	Concepts of Science or any 4 hour lab science	4
KNES	2102	Movement Activities for Children	2
MATH	2033 and 2043	Structure of the Number System I and II	6
READ	3013	Child and Adolescent Literature	3

Professional Education and Reading Blocks 29 hours

Block 1: Student must have passed THEA or equivalent and 60 semester hours.

EDUC	3153	Educational Psychology	3
SPED	3613	Exceptional Individuals	3

Block 2: Student must be admitted to the Teacher Education Program before enrolling.

EDUC	3162	Classroom Management	2
EDUC	4102	Teaching Science in Elementary School	2
EDUC	4202	Teaching Math in Elementary School	2
EDUC	4302	Teaching Social Studies in Elementary School	2

Block 3: Student must have finished Blocks 1 and 2 before taking the following courses.

READ	4203	Developmental Reading	3
READ	4213	Methods of Teaching Reading and the Language Arts	3

Concurrent or after Block 3:

READ	4273	Content Reading	3
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To be taken in last semester:

EDUC 4166 Student Teaching	6
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Total Semester Hours	120
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Bachelor of Science in Interdisciplinary Studies
Special Education Early Childhood through Grade 12
General Education Early Childhood through Grade 6

Academic Foundations and Core Curriculum	44 hours
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ENGL 1113, 1123 Rhetoric and Composition	6
ENGL Sophomore literature	6
GNSC 1104, 1204 Life/Earth Science and Physical Science	8
HIST 1133, 1233 Survey of American History	6
POLS 1333, 1433 American Government	6
MATH 1233 College Algebra	3
SPCH 1133, 1233, or 2423 Fundamentals of Speech, Voice and Diction, or Interpersonal Communication	3
One course from: ART 4303, MUSC 3813, THEA 4423	3
Choose 3 hours from the following courses:	3
PSYC 1103 General Psychology	
SOCL 1133 Introduction to Sociology	
ECON 1333 General Economics	
ECON 2333 Macroeconomics	
ECON 2433 Microeconomics	

Teaching Field (Major)	66 hours
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One course from: ART 4303, MUSC 3813, THEA 4423*	3
ECED 3103 Introduction to Young Children	3
ECED 4123 Early Childhood Development: Language and Literacy	3
GNSC 1104*, 1204* Life/Earth Science and Physical Science	8
GNSC 3104 Concepts of Science or any 4 hour lab science	4
HIST 1133*, 1233* Survey of American History	6
MATH 1233* College Algebra	3
MATH 2033, 2043 Structure of Number System I and II	6
POLS 1333*, 1433* American Government	6
READ 3013 Child and Adolescent Literature	3
SPED 3313 Teaching Strategies for Cognitive Disorders	3
SPED 4113 Foundations of Special Education	3
SPED 4123 Assessment	3
SPED 4313 Tier III Reading Strategies	3
SPED 4513 Teaching Strategies for Affective Disorders	3
SPED 4523 Vocational/Transitional Education	3
SPED 4533 Early Childhood Special Education	3

*26 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Other Requirements	11 hours
COUN 2023 Human Development	3
EDUC 1023 or computer proficiency demonstrated through department exam.	3
EDUC 2013 School and Society	3
KNES 2102 Movement Activities for Children	2
Professional Education and Reading Blocks	26 hours
Block 1: Student must have passed THEA or equivalent and 60 semester hours.	
EDUC 3153 Educational Psychology	3
SPED 3613 Exceptional Individuals	3
Block 2: Student must be admitted to the Teacher Education Program before enrolling.	
EDUC 3162 Classroom Management	2
EDUC 4102 Teaching Science in Elementary School	2
EDUC 4202 Teaching Math in Elementary School	2
EDUC 4302 Teaching Social Studies in Elementary School	2
Block 3: Student must have finished Blocks 1 and 2 before taking the following courses.	
READ 4203 Developmental Reading	3
READ 4213 Methods of Teaching Reading and the Language Arts	3
To be taken in last semester:	
EDUC 4166 Student Teaching	6
Total semester hours	121

Bachelor of Science in Interdisciplinary Studies Bilingual Generalist and General Education EC-6

Academic Foundations and Core Curriculum	46 hours
ENGL 1113, 1123 Rhetoric and Composition	6
SPAN 1134, 1234 Elementary Spanish	8
GNSC 1104, 1204 Life/Earth Science and Physical Science	8
HIST 1133, 1233 Survey of American History	6
POLS 1333, 1433 American Government	6
MATH 1233 College Algebra	3
SPCH 1133, 1233, or 2423 Fundamentals of Speech, Voice and Diction, or Interpersonal Communication	3
ART 4303 or MUSC 3813 Foundations of Art or Music	3
Choose 3 hours from the following courses:	3
PSYC 1103 General Psychology	
SOCL 1133 Introduction to Sociology	
ECON 1333 General Economics	
ECON 2333 Macroeconomics	
ECON 2433 Microeconomics	

Teaching Field (Major) 69 hours

ART 4303 or MUSC 3813	Foundations of Art or Music	3
COUN 2023	Human Development	3
ECED 3173	ESL Methods & Materials	3
ECED 4123	Early Childhood Language & Literacy	3
ECED 4133	Early Childhood Curriculum	3
EDBE 3213	Concepts/Foundations of Bilingual & Multicultural Education	3
EDBE 3313	Methods & Materials in Bilingual Education	3
EDBE 4303	Second Language Acquisition	3
EDBE 4323	Reading & Language Arts in Bilingual Education	3
EDBE 4333	Assessment in Bilingual Education	3
GNSC 1104*, 1204*	Life/Earth Science and Physical Science	8
GNSC 3104	Concepts of Science or any 4 hour lab science	4
HIST 1133*, 1233*	Survey of American History	6
MATH 1233*	College Algebra	3
MATH 2033, 2043	Structure of Number System I and II	6
POLS 1333*, 1433*	American Government	6
READ 3013	Child and Adolescent Literature	3
SPCH 1133, 1233, or 2423*	Fundamentals of Speech, Voice and Diction, or Interpersonal Communication	3

*29 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Other Requirements 8 hours

EDUC 1023	or computer proficiency demonstrated through department exam.	3
EDUC 2013	School and Society	3
KNES 2102	Movement Activities for Children	2

Professional Education and Reading Blocks 29 hours

Block 1: Student must have passed THEA or equivalent and 60 semester hours.

EDUC 3153	Educational Psychology	3
SPED 3613	Exceptional Individuals	3

Block 2: Student must be admitted to the Teacher Education Program before enrolling.

EDUC 3162	Classroom Management	2
EDUC 4102	Teaching Science in Elementary School	2
EDUC 4202	Teaching Math in Elementary School	2
EDUC 4302	Teaching Social Studies in Elementary School	2

Block 3: Student must have finished Blocks 1 and 2 before taking the following courses.

READ 4203	Developmental Reading	3
READ 4213	Methods of Teaching Reading and the Language Arts	3

Concurrent or after Block 3:

READ 4223	Diagnosis and Correction of Reading Difficulties	3
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To be taken in last semester:

EDUC 4163	Student Teaching	3
EDUC 4263	Student Teaching in Bilingual Classroom	3

Total Semester Hours 123

ENDORSEMENT

English as a Second Language

This endorsement is available at the graduate level. With permission, students within one semester of graduation may begin course work on this graduate endorsement. See the *Graduate Catalog*.

SECONDARY TEACHER CERTIFICATION Grades 8 - 12

Secondary teacher certification is based on bachelor's degrees offered in academic areas of the University. In addition to the requirements for the degree, students seeking certification take 14 hours of Professional Education, a course in reading, and student teaching. The requirements for secondary teacher certification may be slightly different from those of the degree without teacher certification but include academic foundations, a major field, a minor field, and special program requirements for the degree and major. Careful planning and advisement with both the major college and the West College of Education are important.

Professional Education for Secondary Certification. The professional secondary education block includes student teaching and field experience in schools and provides beginning skills for teaching. Initial certification is the first step in a teacher's career path for professional development.

Teaching Fields. The West College of Education offers the following teaching fields for grades 8-12 certification: English Language Arts and Reading, History, Mathematics, Science (Composite and Life), and Social Studies. An additional teaching field is offered in French.

BACHELOR OF ARTS WITH SECONDARY CERTIFICATION (GRADES 8-12)

Academic Foundations and Core Curriculum plus additional requirements	47 hours
ENGL 1113, 1123	6
6 hours sophomore literature* or Humanities	6
SPCH 1133 or 2423	3
MATH 1233	3
Natural Sciences - two laboratory courses	6
HIST 1133, 1233	6
POLS 1333, 1433	6
ECON 1333 or 2333 or 2433**	3
PSYC 1103 or SOCL 1133	3
EXPH 2 activity courses	2
Fine Arts	3

* Sophomore literature required for English Language Arts and Reading.

** Econ 2333 required for Social Studies program.

Additional General and B.A. Requirements	17 hours
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EDUC 1023 or computer proficiency demonstrated through department exam.	3
Foreign Language - 2 years of one foreign language	14

Professional Education 23 hours

EDUC 2013 School and Society	3
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Block 1: Student must have passed THEA or equivalent and 60 semester hours.

EDUC 3153 Educational Psychology	3
SPED 3613 Exceptional Individuals	3

Block 2: Student must be admitted to the Teacher Education Program before enrolling.

EDUC 3162 Classroom Management	2
EDUC 4113 Planning and Assessment for Secondary Education and All-Level	3
READ 4273 Content Reading	3

To be taken in last semester:

EDUC 4166 Student Teaching	6
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English Language Arts and Reading**Major: English 36 hours**

ENGL 1113*, 1123*	6
6 hours sophomore literature*	6
ENGL 3213, 3503, 3513 and 4013	12
3 additional hours from 3000 level	3
3 hours from ENGL 4773, 4783, 4863, 4873, 4883, or 4953	3
6 additional hours from 4000 level	6

*12 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Reading Concentration 9 hours

READ 4223, 4253, and 4273*	9
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*3 hours are duplicated in Professional Education but the total program hours do not change.

Elective 3 hours**Total Semester Hours 120****Social Studies****Major: History 30 hours**

HIST 1133*, 1233* Survey of American History	6
HIST 1333, 1433 Survey of Western Civilization	6
HIST 3003 Survey of Texas History	3
HIST 3133 World Religions and Cultures	3
HIST 4433 Twentieth Century Europe	3
3 hours advanced U.S. History	3
3 hours advanced European History	3
3 hours advanced Non-U.S., Non-European History	3

*6 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Interdisciplinary Minor	21 hours
POLS 1333*, 1433* American Government	6
POLS 2523 Foundations of Government and Politics	3
POLS 3313 Introduction to Political Theory	3
ECON 2333* Macroeconomic Principles	3
GEOG 3003, 3013 Geography of the World/Geography of North America	6
*9 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.	
Total Semester Hours	123

BACHELOR OF SCIENCE WITH SECONDARY CERTIFICATION (GRADES 8-12)

Academic Foundations and Core Curriculum	46 hours
ENGL 1113, 1123	6
6 hours humanities (two semesters of one foreign language required for science majors)	6
SPCH 1133 or 2423	3
MATH 1233*	3
Natural Sciences - two semesters of one lab science	8
**CHEM 1141, 1143, 1241, 1243	
***PHYS 1144 or 1624 and 1244 or 2644	
HIST 1133, 1233	6
POLS 1333, 1433	6
PSYC 1103 or SOCL 1133	3
EXPH 2 activity courses	2
Fine Arts	3
* Math majors should take MATH 1634 instead.	
** Required for composite science majors.	
*** Required for life science major.	

Professional Education	23 hours
EDUC 2013 School and Society	3
Block 1: Student must have passed THEA or equivalent and 60 semester hours.	
EDUC 3153 Educational Psychology	3
SPED 3613 Exceptional Individuals	3
Block 2: Student must be admitted to the Teacher Education Program before enrolling.	
EDUC 3162 Classroom Management	2
EDUC 4113 Planning and Assessment for Secondary Education and All-Level	3
READ 4273 Content Reading	3
To be taken in last semester:	
EDUC 4166 Student Teaching	6

Additional General Requirements **6 hours**

EDUC 1023 or demonstrate computer proficiency through department exam. (Math majors meet requirement in additional requirements.)	3
ECON 1333 or 2333 or 2433	3

**Mathematics
(Grades 8-12)****Major: Mathematics** **36 hours**

MATH 1634* Calculus I	4
MATH 1734 Calculus II	4
MATH 2133 Introduction to Modern Mathematics	3
MATH 2534 Calculus III	4
MATH 3133 Foundations of Geometry	3
MATH 3293 Abstract Algebra I	3
MATH 3833 Linear Algebra	3
MATH 4133 Mathematical Statistics I	3
MATH 4733 Introductory Analysis I	3
3 hours chosen from one of the following:	3
MATH 4143 Mathematical Statistics II	
MATH 4293 Abstract Algebra II	
MATH 4833 Introductory Analysis II	
3 advanced hours elective MATH (exclusive of 3033, 3113, 3123, 4033)	3

*4 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Program Requirements **18 hours**

CMPS 1044* Computer Science I	4
CMPS 1053 Computer Science II	3
STAT 3573 Probability and Statistics	3
2 semesters lab science (different than core requirement)	8

*3 of these hours are duplicated in Additional General Requirements but the total program hours do not change.

Total semester hours **123****Composite Science
(Grades 8-12)****Major: Composite Science** **44 hours**

BIOL 1144 General Zoology	4
BIOL 1544 General Botany	4
BIOL 3054 Principles of Biology I	4
BIOL 3104 Fundamental Genetics	4
Choose 4 hours from:	4
BIOL 3024, 3434, 3534	

GEOS 1134 Physical Geology	4
Choose 4 hours from:	4
GEOS 1234 or ENSC 1114	
GEOS 3034 Oceanography	4
CHEM 2003, 2001 Organic Chemistry	4
PHYS 1144, 1244 General Physics	8
Program Requirement	3 hours
MATH 1433 Plane Trigonometry	3
Total semester hours	122

Life Science (Grades 8-12)

Major: Biology	31-32 hours
BIOL 1144 General Zoology	4
BIOL 1544 General Botany	4
BIOL 3054 Principles of Biology I	4
BIOL 3064 Principles of Biology II	4
BIOL 3144 or 3044 Physiology or Bacteriology	4
BIOL 3104 Fundamental Genetics	4
BIOL 3534 Systematic Botany	4
BIOL 3434 or 3643 Entomology or Invertebrate Zoology	3-4
Program Requirements	15 hours
CHEM 1143, 1141 General Chemistry	4
CHEM 1243, 1241 General Chemistry	4
CHEM 2003, 2001 Organic Chemistry	4
MATH 1433 Plane Trigonometry	3
Total Semester Hours	121-122

Other Teaching Fields (Grades 8-12)

Students desiring certification in the teaching field of French (all-level) need to confer with the Chair of the Foreign Language Department.

French - 26 hours

FREN 1134, 1234, 2133, 2233, 3133, 3233, 3333, 4013.

BUSINESS

Bachelor of Business Administration with Teacher Certification

Academic Foundations and Core Curriculum 47 hours plus additional requirements

ENGL 1113, 1123	6
SPCH 1133 or 2423	3
HIST 1133, 1233	6
POLS 1333, 1433	6
Natural Sciences - two laboratory courses	6
MATH 1233 or 1203	3
MIS 2003	3
Humanities	6
Fine Arts - 3 hours from art, music, or theatre, or MCOM 2213	3
SOCL 1133 or PSYC 1103	3
EXPH 2 activity courses	2

Major in General Business 51 hours

ACCT 2143 Financial Accounting	3
ACCT 2243 Managerial Accounting	3
BUAD 1033 Foundations of Business	3
BUAD 3033 Business and Economic Statistics	3
BUAD 3323 Business Ethics	3
ECON 2333 Macroeconomics Principles	3
ECON 2433 Microeconomic Principles	3
FINC 3733 Business Finance	3
LSBA 3233 Legal Environment of Business	3
MGMT 3013 Organizational Behavior in Business	3
MGMT 3453 Operations Management	3
MGMT 4853 Strategic Management	3
MIS 3003 Management Information Systems	3
MKTG 3723 Principles of Marketing	3
Choose 9 hours from the following:	9
ACCT 3003 Accounting Applications	
ECON 3323 Intermediate Macroeconomics	
ECON 3333 Intermediate Microeconomics	
ECON 4723 Comparative Economic Systems	
FINC 3353 Financial Markets and Institutions	
LSBA 3243 Commercial Law	
MGMT 4213 Human Resource Management	
MGMT 4613 Supervisory Management	
MIS 3203 Electronic Commerce	
MKTG 3763 Professional Selling	

Professional Education for Secondary Certification 23 hours

EDUC 2013 School and Society	3
EDUC 3153 Educational Psychology	3

EDUC 3162	Classroom Management	2
EDUC 4113	Planning and Assessment for Secondary Education and All-Level	3
EDUC 4466	Student Teaching in the Secondary School	6
READ 4273	Content Reading	3
SPED 3613	Exceptional Individuals	3

Total Semester Hours **121**

All-Level Teaching Fields

All-Level Certification is available in five disciplines for students who wish to teach grades EC - 12.

BFA: Art All-Level	BM: Music All-Level
BA: Kinesiology All-Level	BA: Spanish All-Level
BS: Kinesiology All-Level	BFA: Theatre All-Level

ART

Bachelor of Fine Arts with Teacher Certification

Art All-Level

The Bachelor of Fine Arts degree with teacher certification is a studio-intensive program that prepares students to teach art at all levels (K-12) in public and private educational institutions.

Academic Foundations and Core Curriculum **50 hours**
plus additional requirements

ENGL 1113, 1123	6
SPCH 1133, 1233, or 2423	3
HIST 1133, 1233	6
POLS 1333, 1433	6
Natural Sciences - two laboratory courses	6
MATH 1233	3
Fine Arts – ART 1113	3
Humanities – ART 3413, 3423	6
SOCL 1133 or PSYC 1103	3
ECON 1333 or 2333 or 2433	3
Exercise Physiology (2 different activity courses or one semester of marching band and 1 activity, or two semesters of marching band)	2
ART 1333	3

Major in Art **63 hours**

ART 1113*, 1123 2-D Design and 3-D Design	6
ART 1313, 1323 Drawing I and II	6
ART 2013 Photography I	3
ART 2153 Printmaking I	3
ART 2313 Painting I	3

ART 2523 Sculpture I	3
ART 2613 Ceramics I	3
ART 2813 Metals I	3
ART 4303 Foundations of Art Education I	3
ART 4403 Foundations of Art Education II (must be taken concurrently with EDUC 3162)	3
ART 3413*, 3423* History of World Art I and II	6
Art History Elective (non-Western)	3
Art History Elective	3
ART 4923 Senior Exhibition	3
Studio Area (12 hours – 6 hours of three-dimensional and 6 hours of two-dimensional studio classes):	12
Three-Dimensional:	
ART 3523, 3533, 4553 - Sculpture	
ART 3603, 3613, 4603 - Ceramics	
ART 3813, 3823, 4813 - Metals	
Two-Dimensional:	
ART 3303, 3323, 4313 - Painting	
ART 3143, 3153, 4143 - Printmaking	
ART 3013, 3023, 4013 - Photography	
ART 3703, 3713, 4703 - Graphic Design	
ART 3213, 4213, 4223 - Drawing	
ART 4113, 4123 Photography in Great Britain	
ART 4163 Domestic/International Field Study	
ART 4513 Exhibition and Presentation Methods	
ART 4543 Topics in Studio Art	
ART 4933 Visual Arts Apprenticeship	

*9 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Professional Education for Secondary Certification **23 hours**

EDUC 2013 School and Society	3
EDUC 3153 Educational Psychology	3
EDUC 3162 Classroom Management (must be taken concurrently with ART 4403)	2
EDUC 4166 Student Teaching	6
READ 4273 Content Reading	3
SPED 3613 Exceptional Individuals	3
ART 4403* Foundations of Art Education II (must be taken concurrently with EDUC 3162)	3

*3 hours are duplicated in Major but the total program hours do not change.

Total Semester Hours **124**

KINESIOLOGY

Bachelor of Arts with Teacher Certification (Grades EC-12, All-Level)

Academic Foundations and Core Curriculum plus additional requirements

44 hours

ENGL 1113, 1123	6
6 hours sophomore literature	6
SPCH 1133 or 2423	3
MATH 1233	3
BIOL 1134	4
BIOL 1144 or 1234 or 1544	4
HIST 1133, 1233	6
POLS 1333, 1433	6
Fine Arts (art, music, theatre) or MCOM 2213	3
Choose 3 hours from the following courses:	3
PSYC 1103 General Psychology	
SOCL 1133 Introduction to Sociology	
ECON 1333 General Economics	
ECON 2333 Macroeconomics	
ECON 2433 Microeconomics	

Additional General Requirements

17 hours

EDUC 1023 or demonstrate computer proficiency through department exam.	3
Foreign Language - 2 years of one foreign language	14

Major in Kinesiology

33 hours

ATRNL 1073 Care and Prevention of Athletic Injuries	3
EXPH 2503 Physiology of Sport and Fitness	3
KNES 1503 Concepts of Fitness and Wellness	3
KNES 3323 Coaching Theory & Practice	3
KNES 3333 Outdoor Education	3
KNES 3353 Officiating	3
KNES 3363 Motor Skill Acquisition and Analysis	3
KNES 3423* Team Sports	3
KNES 3433* Individual and Dual Sports	3
KNES 4033 Sport and Exercise Psychology	3
KNES 4663 Fundamentals of Elementary Physical Education	3

*Meets 2 activities requirement for core.

Professional Education for All-Level Certification

23 hours

EDUC 2013 School and Society	3
EDUC 3153 Educational Psychology (Block 1)	3
KNES 4513 Adapted Physical Activity (Block 1)	3
EDUC 3162 Classroom Management (Block 2)	2

EDUC 4113	Planning and Assessment for Secondary Education and All-Level (Block 2)	3
EDUC 4166	Student Teaching	6
READ 4273	Content Reading	3
Elective		3 hours
Total Semester Hours		120

KINESIOLOGY

Bachelor of Science with Teacher Certification (Grades EC-12, All-Level)

Academic Foundations and Core Curriculum plus additional requirements		47 hours
ENGL 1113, 1123		6
6 hours sophomore literature or humanities		6
SPCH 1133 or 2423		3
MATH 1233; 1433 or STAT 3573		6
BIOL 1134		4
BIOL 1144 or 1234 or 1544		4
HIST 1133, 1233		6
POLS 1333, 1433		6
Fine Arts (art, music, theatre) or MCOM 2213		3
Choose 3 hours from the following courses:		3
PSYC 1103 General Psychology		
SOCL 1133 Introduction to Sociology		
ECON 1333 General Economics		
ECON 2333 Macroeconomics		
ECON 2433 Microeconomics		
Additional General Requirements		11 hours
EDUC 1023 or demonstrate computer proficiency through department exam.		3
Sciences - two laboratory courses of same discipline - not biology		8
Major in Kinesiology		33 hours
ATRN 1073	Care and Prevention of Athletic Injuries	3
EXPH 2503	Physiology of Sport and Fitness	3
KNES 1503	Concepts of Fitness and Wellness	3
KNES 3323	Coaching Theory & Practice	3
KNES 3333	Outdoor Education	3
KNES 3353	Officiating	3
KNES 3363	Motor Skill Acquisition and Analysis	3
KNES 3423*	Team Sports	3
KNES 3433*	Individual and Dual Sports	3

KNES 4033	Sport and Exercise Psychology	3
KNES 4663	Fundamentals of Elementary Physical Education	3

*Meets 2 activities requirement for core.

Professional Education for All-Level Certification **23 hours**

EDUC 2013	School and Society	3
EDUC 3153	Educational Psychology (Block 1)	3
KNES 4513	Adapted Physical Activity (Block 1)	3
EDUC 3162	Classroom Management (Block 2)	2
EDUC 4113	Planning and Assessment for Secondary Education and All-Level (Block 2)	3
EDUC 4166	Student Teaching	6
READ 4273	Content Reading	3

Electives **6 hours**

Total Semester Hours **120**

MUSIC

Bachelor of Music with Teacher Certification

Music All-Level, Vocal Emphasis

The Bachelor of Music degree with teacher certification focuses on preparing students for careers in music education and for certification by the Texas Board of Education (K-12, all-area).

Academic Foundations and Core Curriculum **47 hours**

ENGL 1113, 1123	6
SPCH 1133, 1233, or 2423	3
HIST 1133, 1233	6
POLS 1333, 1433	6
Natural Sciences - two laboratory courses	6
MATH 1233	3
Fine Arts – MUSC 1603	3
Humanities – MUSC 3733, 3743	6
SOCL 1133 or PSYC 1103	3
ECON 1333 or 2333 or 2433	3
Exercise Physiology (2 different activity courses or one semester of marching band and 1 activity, or two semesters of marching band)	2

Computer Competency Requirement **3 hours**

EDUC 1023 or demonstrate computer proficiency through department exam.	3
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Major in Music **64-68 hours**

MUSC 1601, 1603*	Elem Sight-Singing & Ear Training/Music Theory I	4
MUSC 1611, 1613	Elem Sight-Singing & Ear Training/Music Theory II	4
MUSC 2603	Music Theory III	3
MUSC 2613	Music Theory IV	3
MUSC 3632	Analysis of Musical Form	2
MUSC 3662	Orchestration	2
MUSC 3733*	Western and World Music I	3
MUSC 3743*	Western and World Music II	3
MUSC 3753	Western and World Music III	3
MUSC 4843	Basic Conducting	3
MUSC 4863	Choral Conducting	3
MUSC 3893	Music Technology	3
MUSC 3141	Woodwind Instruments Class	1
MUSC 3161	Brass Instruments Class	1
MUSC 3181	String Instruments Class	1
MUSC 3291	Percussion Instruments Class	1
MUSC 4823	Foundations of Music II	3
MUSC 4873	Foundations of Music III	3
	(must be taken concurrently with EDUC 3162)	
AMUS 1201, 2201, 3201	Voice (2 semesters at 1000-level; 2 semesters at 2000-level; 2 semesters at 3000-level)	6
AMUS 4961	Senior Recital	1
MUSC 1001, 2001, 3001, 4001	University Singers (2 semesters at 1000-level; 2 semesters at 2000-level; 2 semesters at 3000-level; 1 semester at 4000-level)	7
MUSC 1000	Recital Attendance (7 semesters)	0
MUSC 1211, 1221	Diction I and II	2
MUSC 3862	Choral Literature	2
	Piano Proficiency (sufficient hours to pass proficiency examination):	0-4
	MUSC 1111/1121, AMUS 1231 Beginning Piano/Piano Class/Piano Proficiency	

*9 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Professional Education for All-Level Certification **23 hours**

EDUC 2013	School and Society	3
EDUC 3153	Educational Psychology	3
SPED 3613	Exceptional Individuals	3
EDUC 3162	Classroom Management	2
	(must be taken concurrently with MUSC 4873)	
READ 4273	Content Reading	3
EDUC 4166	Student Teaching	6
MUSC 4873*	Foundations of Music III	3
	(must be taken concurrently with EDUC 3162)	

*3 hours duplicated in Major but does not change total program hours.

Total Semester Hours **125-129**

MUSIC

Bachelor of Music with Teacher Certification

Music All-Level, Instrumental Emphasis

The Bachelor of Music degree with teacher certification focuses on preparing students for careers in music education and for certification by the Texas Board of Education (K-12, all-area).

Academic Foundations and Core Curriculum	47 hours
ENGL 1113, 1123	6
SPCH 1133, 1233, or 2423	3
HIST 1133, 1233	6
POLS 1333, 1433	6
Natural Sciences - two laboratory courses	6
MATH 1233	3
Fine Arts – MUSC 1603	3
Humanities – MUSC 3733, 3743	6
SOCL 1133 or PSYC 1103	3
ECON 1333 or 2333 or 2433	3
Exercise Physiology (normally met by 2 semesters of marching band)	2
Computer Competency Requirement	3 hours
EDUC 1023 or demonstrate computer proficiency through department exam.	3
Major in Music	61-65 hours
MUSC 1601, 1603* Elem Sight-Singing & Ear Training/Music Theory I	4
MUSC 1611, 1613 Elem Sight-Singing & Ear Training/Music Theory II	4
MUSC 2603 Music Theory III	3
MUSC 2613 Music Theory IV	3
MUSC 3632 Analysis of Musical Form	2
MUSC 3662 Orchestration	2
MUSC 3733* Western and World Music I	3
MUSC 3743* Western and World Music II	3
MUSC 3753 Western and World Music III	3
MUSC 4843 Basic Conducting	3
MUSC 4853 Instrumental Conducting	3
MUSC 3893 Music Technology	3
MUSC 3141 Woodwind Instruments Class	1
MUSC 3161 Brass Instruments Class	1
MUSC 3181 String Instruments Class	1
MUSC 3281 Voice Class	1
MUSC 3291 Percussion Instruments Class	1
MUSC 4823 Foundations of Music II	3
MUSC 4873 Foundations of Music III	3
(must be taken concurrently with EDUC 3162)	
Applied Music (2 semesters at 1000-level; 2 semesters at 2000-level; 2 semesters at 3000-level)	6

AMUS 4961 Senior Recital	1
MUSC: Major Ensemble* (2 semesters at 1000-level; 2 semesters at 2000-level; 2 semesters at 3000-level; 1 semester at 4000-level)	7
MUSC 1000 Recital Attendance (7 semesters)	0
Piano Proficiency (sufficient hours to pass proficiency examination): MUSC 1111/1121, AMUS 1231 Beginning Piano/Piano Class/Piano Proficiency	0-4

*11 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Professional Education for All-Level Certification **23 hours**

EDUC 2013 School and Society	3
EDUC 3153 Educational Psychology	3
SPED 3613 Exceptional Individuals	3
EDUC 3162 Classroom Management (must be taken concurrently with MUSC 4873)	2
READ 4273 Content Reading	3
EDUC 4166 Student Teaching	6
MUSC 4873* Foundations of Music III (must be taken concurrently with EDUC 3162)	3

*3 hours are duplicated in Major but the total program hours do not change.

Total Semester Hours **120-124**

SPANISH

Bachelor of Arts with Teacher Certification (Grades EC-12, All-Level)

Academic Foundations and Core Curriculum **47 hours**
plus additional requirements

ENGL 1113, 1123	6
MATH 1233	3
Humanities - met by courses required in major (SPAN 1134/1234)	8
Sciences - two laboratory courses	6
HIST 1133, 1233	6
ECON 1333 or 2333 or 2433	3
POLS 1333, 1433	6
PSYC 1103 or SOCL 1133	3
SPCH 1133 or 2423	3
Fine Arts	3

Additional General Requirements **5 hours**

EDUC 1023 or demonstrate computer proficiency through department exam.	3
EXPH 2 activity courses	2

Major in Spanish	38 hours
SPAN 1134* Elementary Spanish I	4
SPAN 1234* Elementary Spanish II	4
SPAN 2133 Intermediate Spanish I	3
SPAN 2233 Intermediate Spanish II	3
SPAN 3013 or 3023 Spanish Civilization or Spanish American Civilization	3
SPAN 3003 Introduction to Hispanic Literature	3
SPAN 3333 Conversation and Composition	3
SPAN 4433 Advanced Comprehensive Skills	3
6 hours from: SPAN 3133, 3233, 3533, or 3633	6
SPAN 4133 or 4233 Advanced Oral Expression or Advanced Grammar and Composition	3
3 hours SPAN electives	3

*8 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Professional Education for All-Level Certification	23 hours
EDUC 2013 School and Society	3
EDUC 3153 Educational Psychology	3
EDUC 3162 Classroom Management	2
EDUC 4113 Planning and Assessment for Secondary Education and All-Level	3
EDUC 4166 Student Teaching	6
READ 4273 Content Reading	3
SPED 3613 Exceptional Individuals	3

Minor	18 hours
Total Semester Hours	123

THEATRE

Bachelor of Fine Arts with Teacher Certification (Grades EC-12, All-Level)

The purpose of the Bachelor of Fine Arts degree with teacher certification is to prepare the student to teach and produce theatre in primary, middle, or secondary school settings.

Academic Foundations and Core Curriculum	47 hours
ENGL 1113, 1123	6
SPCH 1233	3
HIST 1133, 1233	6
POLS 1333, 1433	6
Natural Sciences - two laboratory courses	6
MATH 1233	3
Fine Arts – THEA 1403	3
Humanities – THEA 2433, 2443	6
SOCL 1133 or PSYC 1103	3
ECON 1333, 2333, or 2433	3

Exercise Physiology (2 different activity courses or one semester of marching band and 1 activity, or two semesters of marching band) 2

Computer Competency Requirement 3 hours

EDUC 1023 or demonstrate computer proficiency through department exam. 3

NOTE: A grade of D will not be accepted to meet requirements for the Theatre Core or Additional Theatre Requirements.

Theatre Core Requirements 39 hours

SPCH 1233* Voice and Diction 3
 THEA 1121 Rehearsal and Production I (2 semesters of enrollment) 2
 THEA 1403* Introduction to Acting 3
 THEA 1513 Stagecraft 3
 THEA 1613 Performance Makeup 3
 THEA 2121 Rehearsal and Production II (2 semesters of enrollment) 2
 THEA 2433* Theatre History I 3
 THEA 2443* Theatre History II 3
 THEA 3003 Contemporary Theatre 3
 THEA 3013 Costume Construction 3
 THEA 3121 Advanced Rehearsal and Production I (2 semesters of enrollment) 2
 THEA 3423 Script Analysis 3
 THEA 3433 Principles of Directing 3
 THEA 4483 Collaborative Play Production 3

*12 hours are duplicated in Academic Foundations and Core Curriculum but the total program hours do not change.

Additional Theatre Requirements 24 hours

THEA 2113 Stage Movement 3
 THEA 3143 Stage Management 3
 THEA 3393 Advanced Acting 3
 THEA 3473 Performance Lighting 3
 THEA 3493 Performance Sound 3
 THEA 4513 Advanced Project in Performance **OR** 3
 THEA 4523 Advanced Project in Design/Technology
 Selective Courses - 6 hours from: 6
 THEA 3353 Theatre Graphics
 THEA 4363 Scene Design
 THEA 4373 Costume Design
 THEA 4213 Voice for the Theatre and Dialects
 THEA 4223 Period Style and Movement

Education Requirements 23 hours

EDUC 2013 School and Society 3
 EDUC 3153 Educational Psychology 3
 SPED 3613 Exceptional Individuals 3
 EDUC 3162 Classroom Management 2

EDUC 4113	Planning and Assessment for Secondary Education and All-Level	3
EDUC 4166	Student Teaching	6
READ 4273	Content Reading	3

Total Semester Hours: 124

COURSES IN BILINGUAL EDUCATION (EDBE)

3213. **Concepts/Foundations of Bilingual & Multicultural Education** 3(3-0)
The historical, legal, legislative, and global contexts of bilingual education as well as models of bilingual education, including characteristics and goals of various types of bilingual education programs.
3313. **Methods and Materials in Bilingual Education** 3(3-0)
Curriculum, methods, and materials for bilingual education including instructional techniques, materials, evaluations, and classroom management.
4303. **Second Language Acquisition** 3(3-0)
Established principles and recent developments in second language acquisition and their educational applications.
4323. **Reading & Language Arts in Bilingual Education** 3(3-0)
Methods and materials for teaching the language arts and reading in Spanish.
4333. **Assessment in Bilingual Education** 3(3-0)
Methods of assessing oral and written language and reading to plan and implement literacy instruction in the bilingual classroom.

COURSES IN COUNSELING (COUN)

2023. **Human Development (TCCNS = TECA 1354)** 3(3-0)
A study of the principles of normal child growth and development from conception through adolescence. Focus on physical, cognitive, social, moral, and emotional domains of development.
4913. **Special Topics in Counseling** 3(2-2)
Topic as announced. Major project and/or field study with group sharing and analysis.

COURSES IN EARLY CHILDHOOD EDUCATION (ECED)

3103. **Introduction to Young Children** 3(2-2)
An introductory overview of the field including the history of early childhood education. Emphasis on characteristics of young children and their needs, types of programs, and current issues.
3173. **ESL Methods and Materials** 3(3-0)
Curriculum, methods and materials for teaching English as a second language.
4123. **Early Childhood Development: Language and Literacy** 3(3-0)
Emphasis on how young children's language and literacy develop and the application of developmentally appropriate practice in planning for instruction.

4133. Early Childhood Curriculum 3(2-2)

Prerequisite: ECED 3103.

Planning the learning environment, developing learning activities, organizing the school day, and interpreting children's growth to parents. Emphasis on developmentally appropriate practice. Field experience required.

COURSES IN EDUCATION (EDUC)**1023. Computer Applications for Education** 3(2-2)

Experience organizing and manipulating data with computers, including hands-on experience with word processing, databases, spreadsheets, graphics, desktop publishing, and graphing. Focus on computer applications for classroom including hardware and software selection, computer environments, telecommunications, and ethics.

2013. School and Society (TCCNS = EDUC 1301) 3(2-2)

An introduction to the teaching profession and the role of the school in a democratic society with an emphasis on educational equity for all students. Field experiences in diverse communities required.

3153. Educational Psychology 3(2-2)

Prerequisites: COUN 2023, EDUC 2013.

Concepts of learning theory and applications, motivation, and measurement and evaluation. Field experience arranged through the instructor.

3162. Classroom Management (former EDUC 3163) 2(1-2)

Co-requisites: Must have concurrent enrollment in EDUC 4102, 4202, 4302; or 4113.

The management of the classroom to optimize student learning. The development of such management skills as active listening, reality therapy, and conflict resolution.

4102. Teaching Science in Elementary School 2(1-2)

Prerequisites: EDUC 3153, SPED 3613, and two science courses.

Co-requisite: EDUC 3162, 4202, and 4302.

Assessment and models of instructional planning in science, emphasis on learning with technology and the models of instruction. Field experience required.

4113. Planning and Assessment for Secondary Education and All-Level 3(3-0)

Prerequisite: EDUC 3153 or concurrent enrollment.

Co-requisite: Must have concurrent enrollment in EDUC 3162.

Models of instructional planning and assessment strategies for teaching in the secondary schools with emphasis on learning with technology.

4163. Student Teaching 3 semester hours

Prerequisites: Senior standing and approval of the dean.

Used when a student pursues elementary certification with an endorsement. Teaching under supervision in a public elementary school; meets full day for six weeks, including orientation; orientation and supervision by college instructor.

4166. Student Teaching 6 semester hours

Prerequisites: Senior standing and approval of the dean.

Teaching under supervision in a public school; meets full day for twelve weeks, including orientation; orientation and supervision by college instructor.

4173. **Student Teaching, Elementary All-Level** 3 semester hours
 Prerequisites: Senior standing and approval of the dean.
 Teaching art, music, or physical education under supervision in a public elementary school; meets full day for six weeks, including orientation; orientation and supervision by college instructor.
4176. **Internship** 6 semester hours
 Prerequisites: Senior standing, a minimum of five years experience as a teacher's aide, and approval of the dean.
 Teaching under supervision in a public school; meets full day for twelve weeks, including orientation; orientation and supervision by college instructor.
4183. **Student Teaching in Early Childhood and Kindergarten** 3 semester hours
 Prerequisites: Completion of 6 hours of early childhood course work, senior standing, and approval of the dean.
 Student teaching for early childhood and kindergarten endorsement; meets full day for six weeks.
4202. **Teaching Math in Elementary School** 2(1-2)
 Prerequisites: EDUC 3153, SPED 3613, and two required math courses.
 Co-requisites: EDUC 3162, 4202, and 4302.
 Assessment and models of instructional planning in math, emphasis on learning with technology and the models of instruction. Field experience required.
4243. **Internship I** 3(0-6)
 Prerequisites: A bachelor's degree, a Texas Probationary Teaching Certificate, and approval of the dean.
 Teacher of record with a mentor in a public school; meets full day for a semester; includes supervision by a college instructor.
4253. **Internship II** 3(0-6)
 Prerequisite: EDUC 4243.
 Teacher of record with a mentor in a public school; meets full day for a semester; includes supervision by a college instructor.
4263. **Student Teaching in Bilingual Classroom** 3 semester hours
 Prerequisites: Senior standing and approval of the dean.
 Teaching under supervision in a public elementary school bilingual classroom; meets full day for six weeks, including orientation; orientation and supervision by college instructor.
4302. **Teaching Social Studies in Elementary School** 2(1-2)
 Prerequisites: EDUC 3153 and SPED 3613. Concurrent enrollment in EDUC 3162, 4102, and 4202.
 Assessment and models of instructional planning in social studies, emphasis on learning with technology and the models of instruction. Field experience required.
4466. **Student Teaching in the Secondary School** 6 semester hours
 Prerequisites: Senior standing and approval of the dean.
 Teaching under supervision in a public secondary school; meets full day for twelve weeks, including orientation; orientation and supervision by college instructor.

4473. **Student Teaching, Secondary All-Level** 3 semester hours
 Prerequisites: Senior standing and approval of the dean.
 Used only when all-level students desire secondary certification in a minor; teaching under supervision in a public secondary school; meets full day for six weeks, including orientation; orientation and supervision by college instructor.
4903. **Independent Study in Education** 3 semester hours
 Prerequisites: Senior standing and approval of dean.
 Designed for advanced students to work in appropriate areas not otherwise available. May be repeated for credit.
4913. **Special Topics in Education** 3(2-2)
 Topic as announced. Major project and/or field study with group sharing and analysis.

COURSES IN READING EDUCATION (READ)

3013. **Child and Adolescent Literature** (formerly ENGL 3013) 3(3-0)
 Exploration of children's and adolescent literature from a variety of literary genres representing various cultural groups.
4203. **Developmental Reading** 3(2-2)
 Prerequisites: EDUC 3153, 3162, 4102, 4202, and 4302.
 Co-requisite: READ 4213.
 Literacy theory and developmental stages of literacy. Planning and organizing for scientifically-based reading instruction including: phonological/phonemic awareness, phonics, comprehension, vocabulary, and fluency.
4213. **Methods of Teaching Reading and the Language Arts** 3(2-2)
 Prerequisites: EDUC 3153, 3162, 4102, 4202, and 4302.
 Co-requisite: READ 4203.
 Planning and organizing for the integrated teaching of scientifically-based reading and language arts (i.e., listening, talking, reading, writing, viewing, visually representing) instruction within the context of the content areas.
4223. **Diagnosis and Correction of Reading Difficulties** 3(2-2)
 Prerequisite: READ 4203 or 4273, or concurrent enrollment in READ 4203.
 Evidence-based teaching strategies for classroom teachers to use for the continuous diagnostic and prescriptive teaching of reading.
4253. **Secondary Reading and Language Arts** 3(3-0)
 Prerequisite: EDUC 3153.
 Methods for designing and implementing instruction that integrates all components of the English language arts (writing, reading, listening/speaking, viewing/representing).
4273. **Content Reading** 3(3-0)
 Prerequisite: EDUC 3153 or concurrent enrollment.
 Strategies and materials for assessing students' content reading needs; instructional techniques and modifications for engaging students in content subjects.
4913. **Special Topics in Reading** 3(2-2)
 Topic as announced. Major project and/or field study with group sharing and analysis.

COURSES IN SPECIAL EDUCATION (SPED)

- 3313. Teaching Strategies for Cognitive Disorders** 3(2-2)
 Prerequisites: SPED 4113, 4123,
 Co-requisite: SPED 4313.
 Strategies for teaching children and adolescents with mild disabilities. Focus on content area learning incorporating formative assessment and planning procedures. Thirty hours field experience required.
- 3613. Exceptional Individuals** 3(3-0)
 Prerequisites: Sixty or more semester hours
 A study of the etiology of and concepts relating to exceptional individuals.
- 4113. Foundations of Special Education** 3(3-0)
 Prerequisites: Sixty or more semester hours
 Co-requisite: SPED 4123.
 Philosophical, historical, and legal foundations of special education. Introduction to roles and responsibilities of the special educator, and legal and ethical requirements of the profession. Theoretical perspectives related to the nature and needs of persons with disabilities; involvement in disability advocacy.
- 4123. Assessment** 3(3-0)
 Prerequisites: Sixty or more semester hours
 Co-requisite: SPED 4113.
 Introduction to data-based decision making through monitoring student progress and designing scientifically-based instruction using formative assessment strategies. Includes statistical concepts, norm-referenced summative assessment, standardized test interpretation, and the development of Individualized Education Plans.
- 4313. Tier III Reading Strategies** 3(3-0)
 Prerequisites: SPED 4113 and 4123.
 Scientifically-based reading instruction in the explicit, sequential, systematic, teaching of decoding skills, fluency, and phonemic awareness for students with dyslexia and other reading-related learning disabilities.
- 4513. Teaching Strategies for Affective Disorders** 3(3-0)
 Using evidence-based interventions to address the needs of students with affective disorders with an emphasis on creating specialized individualized systems of support; includes social skills training, functional behavior assessment. Includes nature and needs of students with emotional/behavioral disorders, and legal issues related to the education of such students. One hour per week field experience required.
- 4523. Vocational/Transitional Education** 3(2-2)
 Prerequisites: SPED 3313 and 4313.
 Multidimensional transition planning and the use of research-supported strategies for preparing adolescents with mild to moderate disabilities for adult life. Includes field experience and advocacy for persons with disabilities. Thirty hours field experience required.
- 4533. Early Childhood Special Education** 3(3-0)
 Prerequisites: SPED 3313 and 4313.
 Development of transdisciplinary Individual Family Service Plans and Strategies for promoting the development of infants and young children with moderate disabilities. Fifteen hours field experience required.

4903. **Independent Study in Special Education** 3 semester hours

Prerequisite: Senior standing or approval of dean.

Designed for advanced students to work in appropriate areas not otherwise available.
May be repeated for credit.

4913. **Special Topics in Special Education** 3(2-2)

Topic as announced. Major project and/or field study with group sharing and analysis.

KINESIOLOGY

MISSION STATEMENT FOR THE KINESIOLOGY PROGRAM

The Kinesiology Program offers degree options designed to prepare students for a variety of career opportunities in physical activity and sport and leisure services. The courses and experiences offered enable graduates to successfully enter teaching, coaching, leadership, and supervisory positions in school and community-based settings. B.A. and B.S. degrees are available for students seeking teacher certification in kinesiology. B.A. and B.S. degrees with a major in Sport and Leisure Studies are offered to students pursuing leadership and supervisory positions in sport, recreation, and leisure services.

KINESIOLOGY MAJOR

BACHELOR OF SCIENCE and BACHELOR OF ARTS Teacher Certification

The requirements for the Bachelor of Arts and Bachelor of Science degrees with a major in kinesiology are as follows:

See pages 154-155 in the Education section for specific course requirements in Academic Foundations and Core Curriculum, Bachelor of Science and Bachelor of Arts requirements, and teacher certification requirements.

Major (33 semester hours)

ATRN 1073, EXPH 2503, KNES 1503, 3323, 3333, 3353, 3363, 3423, 3433, 4033, 4663

Additional General Requirements (3 semester hours)

EDUC 1023, CMPS 1013, or 1033, or demonstrate computer proficiency through department exam.

KINESIOLOGY MINOR

Emphasis I: Kinesiology (18 semester hours)

KNES 1503, 3363, 3423, 3433, 4663, EXPH 2503

Emphasis II: Coaching (18 semester hours)

KNES 3323, 3353, 3363, 4033, ATRN 1073, EXPH 2503

Emphasis III: Recreation & Fitness (18 semester hours)

KNES 1503, 3103, 3203, 3353, 4033, EXPH 2503

SPORT AND LEISURE STUDIES MAJOR

The requirements for the Bachelor of Arts degree and Bachelor of Science degree with a major in Sport and Leisure Studies are as follows:

General (see page 89)

Academic Foundations and Core Curriculum - 54-55 semester hours (See page 91)

Bachelor of Arts (See page 93)

Bachelor of Science (See page 93)

Major (56 semester hours for Bachelor of Arts and 57 semester hours for Bachelor of Science)

MWSU 1233; 2 (B.A.) or 3 (B.S.) semester hours of lower level activity credit beyond MSU core requirements (may include 1-, 2-, or 3-hour lower level activity oriented courses, EXPH 2002, KNES 2102, THEA 2122); 6 semester hours chosen from KNES 3103, 3333, 3423, 3433, THEA 3123; 3 semester hours of sociology beyond MSU core requirements (SOCL 1133 or 2233); KNES 1503, EXPH 2503, KNES 3203, 3353, 3363, 4033, 4973, SOCL 4133, 4233; 15 semester hours of advanced electives approved by program coordinator (minimum of 9 semester hours must be discipline specific – for example Kinesiology, Exercise Science, Recreation and Leisure, Health, Athletic Training; a maximum of 6 semester hours may include such discipline-related subjects as Education, Theatre, Mass Communication, Business, Management, Marketing)

COURSES IN KINESIOLOGY (KNES)

1213. **Concepts of Healthy Living** 3(3-0)
Examination of the health status of children and the development of children's health beliefs and behaviors.
1503. **Concepts of Fitness and Wellness** 3(3-0)
Examination of basic concepts and principles for improving and maintaining health and well-being across the lifespan. Assessment of physical fitness status is required, and individualized training and conditioning plans will be designed and implemented.
2102. **Movement Activities for Children** 2(1-2)
Designed to acquaint the student with practical knowledge and skills leading to a variety of games and activities for children. Satisfies the exercise physiology activities requirement.
3103. **Fitness and Conditioning Activities** 3(3-0)
Theory and practice course designed to prepare fitness instructors for commercial, educational, and clinical settings. Satisfies the exercise physiology activities requirement.
3203. **Program Planning in Recreation and Leisure Services** 3(3-0)
Exploration, discussion, and practical applications of topics and issues relevant to fitness, recreation, and leisure programs.
3323. **Coaching Theory and Practice** 3(3-0)
Philosophical, ethical, pedagogical, and administrative aspects of coaching youth, interscholastic, and intercollegiate sports.

3333. **Outdoor Education** (formerly 4333) 3(3-0)
Introduction to leisure activities emphasizing personal growth, leadership skills, and teamwork in outdoor recreational settings (i.e., mountain biking, orienteering, sailing, camping, rock climbing, and rappelling).
3353. **Officiating** (formerly 2353) 3(3-0)
Rules of selected sports, their interpretation, and the mechanics of sports officiating. The course is designed to develop the skills and knowledge required for admission to the Southwest Officials Association in football, basketball, and other sports.
3363. **Motor Skill Acquisition and Analysis** (formerly 2363) 3(3-0)
Developmental characteristics and biomechanical analysis of motor skills from initial fundamental motor patterns to application in physical activity and sport.
3423. **Team Sports** 3(3-0)
Introduction to selected team sports and activities. Rules, skills, strategies, progressions, and analysis techniques. Demonstration of skill competency and physical fitness status required. Satisfies the exercise physiology activities requirement.
3433. **Individual and Dual Sports** 3(3-0)
Introduction to selected individual/dual sports and activities. Rules, skills, strategies, progressions, and analysis techniques. Demonstration of skill competency and physical fitness status required. Satisfies the exercise physiology activities requirement.
4033. **Sport and Exercise Psychology** 3(3-0)
Introduction to the psychosocial dynamics involved in sport and exercise performance.
4513. **Adapted Physical Activity** 3(3-0)
Program development, instructional practices and modification of activities, equipment and facilities relative to persons with disabilities will be examined. Field experience required.
4663. **Fundamentals of Elementary Physical Education** 3(2-2)
Examination of the principles and skills associated with planning and implementing developmentally appropriate games and activities for school-age children. Demonstration of skill competency and physical fitness status required.
4973. **Leadership in Recreation and Leisure Services** 3(1-5)
Prerequisites: Senior standing, grade of C or better in EXPH 2503, KNES 3203, 3363, 4033, 4513, and satisfaction of the Writing Proficiency Requirement (see page 90). Proof of background check required prior to enrollment.
Structured learning experience designed for students to observe professionals in the field, demonstrate leadership and organizational skills, develop professional contacts, and accumulate practical experiences beneficial for employment and career advancement.
- 4991, 4992, 4993. **Independent Study in Kinesiology** 1-3 semester hours
Prerequisites: Junior or senior standing and permission of instructor and program coordinator.
Supervised reading and research associated with current issues in kinesiology, sport, recreation, and leisure.

LAMAR D. FAIN COLLEGE OF FINE ARTS

Ron Fischli, Dean (Fain Fine Arts Center B128)

MISSION STATEMENT FOR THE LAMAR D. FAIN COLLEGE OF FINE ARTS

The Lamar D. Fain College of Fine Arts encompasses programs in art, mass communication, music, and theatre. The primary purpose of the college is to equip students with the knowledge and skills necessary to pursue careers in these disciplines. To accomplish this purpose, stress is placed on applying classroom learning to process and performance. The college prides itself on ensuring that its students *do* what they study: in its art studios, in its newspaper and television laboratories, and in its concerts, recitals, and dramatic productions. Moreover, the college is committed to offering individualized instruction in functional, up-to-date surroundings. Because the college's offerings are devoted solely to undergraduate programs, because its faculty members are committed to effective teaching, and because the ratio of full-time faculty members to fine arts majors is approximately 1:12, students are assured frequent, high-quality contact with their instructors. The quality of instruction is enhanced by the faculty's desire to serve as models for students through their research and creative endeavors. Frequently these endeavors directly involve students, thus vitalizing their educational experiences.

Besides providing knowledge and training that will qualify students for jobs, graduate study, or professional school, the college endeavors to help students develop aesthetic sensibility, cultural awareness, and social responsibility. Not only are students taught to create within their disciplines, but they are also challenged to evaluate the quality of what they have created, to assess the effect of their and others' creations on the wider culture, and to aspire to professionalism and excellence. The goal is to empower students to use their talents to enrich and advance society. Thus, the Lamar D. Fain College of Fine Arts adopts a twofold mission designed to produce graduates who are both competent professionals and sensitive, reliable, constructive citizens.

THE JUANITA AND RALPH HARVEY SCHOOL OF VISUAL ARTS

Gary Goldberg, Interim Chair (Fain Fine Arts Center C104)

Professors: Goldberg, Yarosz-Ash

Associate Professors: Hilton, Hiraide, Prose

Assistant Professor: Yucus

Professors Emeriti: Ash, Davis, English

MISSION STATEMENT FOR THE ART PROGRAM

The Juanita and Ralph Harvey School of Visual Arts is dedicated to ensuring that the students acquire the necessary foundation knowledge and skills, develop marketable competencies in an area of artistic specialization, and come to see themselves as productive members of the global society and responsible professionals committed to excellence.

Three degree programs are offered for art majors:

Bachelor of Fine Arts with a major in Art

A studio-intensive professional degree program that prepares students for a variety of art and art-related careers, prepares students for graduate study, and provides the basis for further personal research and study.

Bachelor of Fine Arts degree with Teacher Certification, see page 152

A studio-intensive professional degree program that prepares students to teach art at all levels (K-12) in public and private educational institutions.

Bachelor of Arts with a major in Art

Students major in art and select a second emphasis (minor) in another discipline, allowing the flexibility of designing a comprehensive liberal arts curriculum that prepares the student for graduate study or for entrepreneurial careers in the visual arts.

Students who are unsure about which program to choose do not have to decide immediately. Because these degree options share the same core art courses and some electives, there will be time to gain some experience before having to choose a specific academic path to follow. An academic advisor in art will assist students with this decision.

Non-majors may enroll in studio courses.

BACHELOR OF FINE ARTS degree requirements

The requirements for the degree of Bachelor of Fine Arts with a major in Art are as follows:

Academic Foundations and Core Curriculum plus additional requirements **38-40**

ENGL 1113, 1123	6
SPCH 1133, 1233, or 2423	3
HIST 1133, 1233	6
POLS 1333, 1433	6
Natural Sciences - two laboratory courses	6-8
MATH 1053 or 1233	3
(Students seeking teacher certification should take MATH 1233.)	
Fine Arts - met by course required in major	0
Humanities - met by courses required in major	0
SOCL 1133 or PSYC 1103	3
ECON 1333 or 2333 or 2433	3
Exercise Physiology (2 different activity courses or one semester of marching band and 1 activity, or two semesters of marching band)	2

Computer Competency Requirement **0-3**

EDUC 1023, CMPS 1013, 1033, or pass department exam	0-3
(Students seeking teacher certification meet this requirement with ART 1333.)	

Writing Proficiency Requirement

Graduation requirements at Midwestern State University include passing the Writing Proficiency Exam, to be taken after the student has completed 60 hours of coursework. Not passing the exam requires taking and passing ENGL 2113 – Composition Skills.

Major in Art	81
ART 1113, 1123 2-D Design and 3-D Design	6
ART 1313, 1323 Drawing I and II	6
ART 1333 Computers for Artists	3
ART 3413, 3423 History of World Art I and II	6
Art History Elective (non-Western)	3
Art History Elective	3
ART 2013 Photography I	3
ART 2153 Printmaking I	3
ART 2313 Painting I	3
ART 2523 Sculpture I	3
ART 2613 Ceramics I	3
ART 2813 Metals I	3
ART 3213 or 4213 Drawing III or IV	3
Major Studio (12 hours of one studio area)	12
Choose from Painting, Printmaking, Ceramics, Metals, Photography, Graphic Design, or Sculpture	
Minor Studio (9 hours of one studio area)	9
Choose from Painting, Printmaking, Ceramics, Metals, Photography, Graphic Design, Sculpture, or Drawing	
Advanced Art Electives (9 hours from any art courses 3000 or above)	9
ART 4923 Senior Exhibition	3
Total Semester Hours	119-124
(If necessary, additional elective hour to bring total to 120.)	

BACHELOR OF FINE ARTS - TEACHER CERTIFICATION degree requirements

Academic Foundations, Art requirements, and Professional Education requirements are found on page 152.

BACHELOR OF ARTS degree requirements

The purpose of the B.A. degree is to explore a variety of disciplines versus specialization. The requirements for the degree of Bachelor of Arts with a major in Art are as follows:

Academic Foundations and Core Curriculum plus additional requirements **58-60**

ENGL 1113, 1123	6
SPCH 1133, 1233, or 2423	3
HIST 1133, 1233	6
POLS 1333, 1433	6
Natural Sciences - two laboratory courses	6-8
MATH 1053 or 1233	3
Fine Arts - met by course required in major	0

Humanities - ENGL sophomore literature or humanities	6
SOCL 1133 or PSYC 1103	3
ECON 1333 or 2333 or 2433	3
Foreign Language – 14 hours of one foreign language	14
Exercise Physiology (2 different activity courses or one semester of marching band and 1 activity, or two semesters of marching band)	2

Computer Competency Requirement **0-3**

EDUC 1023, CMPS 1013, 1033, or pass department exam	0-3
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Writing Proficiency Requirement

Graduation requirements at Midwestern State University include passing the Writing Proficiency Exam, to be taken after the student has completed 60 hours of coursework. Not passing the exam requires taking and passing ENGL 2113 – Composition Skills.

Major in Art **42**

ART 1113, 1123 2-D Design and 3-D Design	6
ART 1313 Drawing I	3
ART 1333 Computers for Artists	3
ART 3413, 3423 History of World Art I and II	6
Art History Elective (non-Western)	3
Art History Elective	3
Advanced Studio (18 hours - no more than two classes may be taken in any studio area):	18

- ART 3013 Photography II
- ART 3023 Photography III
- ART 3143 Printmaking II
- ART 3153 Printmaking III
- ART 3303 Painting II
- ART 3323 Painting III
- ART 3523 Sculpture II
- ART 3533 Sculpture III
- ART 3603 Ceramics II
- ART 3613 Ceramics III
- ART 3703 Graphic Design II
- ART 3713 Graphic Design III
- ART 3813 Metals II
- ART 3823 Metals III
- ART 4033 Visual Arts Apprenticeship
- ART 4113 Photography in Great Britain
- ART 4123 Photography in Great Britain
- ART 4163 Domestic/International Field Study
- ART 4513 Exhibition and Presentation Methods
- ART 4533 Topics in Studio Art

Minor (minimum of 18 hours) **18**

Total Semester Hours **118-123**

(If necessary, additional elective hours to bring total to 120.)

MINORS IN ART

Minors in art are designed for students who have an interest in art or art history but have selected major fields of study in other disciplines. An art major pursuing a B.A. may elect to minor in art history.

REQUIREMENTS FOR A MINOR IN ART (18 semester hours)

Choose one from:

ART 1113 2-D Design

ART 1123 3-D Design

ART 1333 Computers for Artists

ART 1313 Drawing I

3 hours of Advanced Art History

9 hours of Advanced Art

REQUIREMENTS FOR A MINOR IN ART HISTORY (18 semester hours)

ART 3413 History of World Art I

ART 3423 History of World Art II

12 hours of 4000-level Art History

NOTE: The college can retain student work as desired for reference or exhibition purposes. If the student, upon due notification, does not claim his/her work after a three-month period, the University will have the right to dispose of it.

COURSES IN ART (ART)

1113. **2-D Design** (TCCNS = ARTS 1311) 3(2-4)
Fundamental elements and principles of 2-dimensional design. Construction, presentation, and rendering skills developed.

1123. **3-D Design** (TCCNS = ARTS 1312) 3(2-4)
Fundamental principles of 3-dimensional design. Continuation of 1113 with emphasis on small construction format developing the use of various tools, materials, and presentation skills.

1313. **Drawing I** (TCCNS = ARTS 1316) 3(2-4)
Drawing a variety of subjects in both wet and dry media with emphasis on black and white visual organization and expression.

1323. **Drawing II** (TCCNS = ARTS 1317) 3(2-4)
Prerequisite: ART 1313.
Continuation of 1313 with emphasis on color drawing media and development through both individual and group projects.

1333. **Computers for Artists** 3(2-4)
Introductory studio experience in using the computer as a creative medium. Emphasizes hands-on software training directed towards the art of visual design and aesthetic expression. Topics include digital imaging, motion graphics, editing, and animation. Will also trace the central role played by computers in the field of the electronic arts from pioneering efforts to current trends.

1413. **Art Appreciation** (TCCNS = ARTS 1301) 3(3-0)
Lectures, slides, and discussion of the visual elements and their application to the arts.
2013. **Photography I** (TCCNS = ARTS 2356) 3(2-4)
Prerequisites: ART 1113, 1123, 1323 or consent of instructor.
Introduction to camera, film, and basic darkroom techniques in black and white photography. Emphasis on photography as a fine art.
2153. **Printmaking I** (TCCNS = ARTS 2333) 3(2-4)
Prerequisites: ART 1113, 1123, 1323 or consent of instructor.
Introduction to printmaking. Beginning instruction in one of the following printmaking processes: intaglio, dealing with etching, aquatint, and soft ground. Relief printing methods including linocuts and relief intaglio applications. Screen process printing (serigraphy) dealing with direct photo emulsions. Monoprint and monotype processes.
2313. **Painting I** (TCCNS = ARTS 2316) 3(2-4)
Prerequisites: ART 1113, 1123, 1323 or consent of instructor.
Introduction to painting. Instruction in one of the following areas: Oil medium, acrylic medium, or watercolor medium. Oil and acrylic painting including the fabrication of stretchers and surface preparations.
2523. **Sculpture I** (TCCNS = ARTS 2326) 3(2-4)
Prerequisites: ART 1113, 1123, 1323 or consent of instructor.
Introduction to sculpture. Emphasis on exploration of materials through the proper use of appropriate tools and working processes. Beginning instruction in the following: casting (flexible and non-flexible mold making, wax model making, substitution materials in bronze, aluminum, plaster, rubber, and plastic); woodworking (hand and power equipment); metal fabrication (oxyacetylene and electrical welding).
2613. **Ceramics I** (TCCNS = ARTS 2346) 3(2-4)
Prerequisites: ART 1113, 1123, 1323 or consent of instructor.
Basic studio practices in handbuilding or wheelthrowing skills and design with an introduction to techniques in decoration and glaze application.
2713. **Graphic Design I, Introduction to Graphic Design** (TCCNS = ARTS 2313) 3(2-4)
Prerequisites: ART 1113, 1333 or consent of instructor.
Introduction to the fundamental components of design theory and the history of graphic design. Creation of solutions to design problems through conceptualization, research, execution, and presentation of projects. Overview of design methodologies.
2813. **Metals I** (TCCNS = ARTS 2341) 3(2-4)
Prerequisites: ART 1113, 1123, 1323 or consent of instructor.
Introduction to metalsmithing. The development of basic construction and manipulation processes of various non-ferrous metals. Minimum of four of the following techniques are covered: rivets, soldering, piercing, casting, enameling, raising, die-forming, and stone setting. Also various surface treatments will be explored including etching, stamping, roll milling, inlay, and patinas. Emphasis on design and craftsmanship.
3013. **Photography II** 3(2-4)
Prerequisite: ART 2013 or consent of instructor.
Photography as an expressive medium, with an emphasis on personal style. Continued

development of advanced darkroom techniques. These include the use of a medium format camera and an introduction to archival processing.

3023. Photography III 3(2-4)

Prerequisite: ART 3013 or consent of instructor.

Color photography as a fine arts medium with emphasis on development of professional skills. This course includes color slide processing, printing, positives from color slides, and color negatives. May be repeated once for credit by mass communication majors.

3143. Printmaking II 3(2-4)

Prerequisite: ART 2153 or consent of instructor.

Introduction to a second print medium: intaglio, relief, or serigraphy emphasizing color printing. (See ART 2153 – Printmaking I for definition of media.)

3153. Printmaking III 3(2-4)

Prerequisite: ART 3143 or consent of instructor.

Advanced study in a previously enrolled medium or introduction to a third process. Emphasizing color printing and technical development. (See Printmaking 2153 for definition of media.)

3213. Drawing III 3(2-4)

Prerequisite: ART 1323 or consent of instructor.

Emphasis on advanced pictorial attitudes and mixed media production through prolonged drawing problems.

3303. Painting II (formerly 2323) 3(2-4)

Prerequisite: ART 2313 or consent of instructor.

Introduction to a second painting medium with emphasis on skill development and individual exploration of ideas. (See Painting 2313 for media options.)

3323. Painting III (formerly 3333) 3(2-4)

Prerequisite: ART 3303 or consent of instructor.

Introduction to a third painting medium with emphasis on continued individual exploration and skill development. (See Painting 2313 for media options.)

3413. History of World Art: Survey I 3(3-0)

An introduction to art and architecture as social products of global human history. Both the comparability and diversity of human social organizations and the role of visual culture in them will be discussed. From the Prehistoric through the Gothic era in Europe.

3423. History of World Art: Survey II 3(3-0)

An introduction to art and architecture as social products of global human history. Both the comparability and diversity of human social organizations and the role of visual culture in them will be discussed. From the fifteenth century to the present.

3523. Sculpture II (formerly 2823) 3(2-4)

Prerequisite: ART 2523 or consent of instructor.

Continuation of Sculpture I. Emphasis on skill development and individual exploration of ideas.

3533. Sculpture III (formerly 3623) 3(2-4)

Prerequisite: ART 3523 or consent of instructor.

Advanced study in various traditional and nontraditional materials with emphasis on continued individual exploration and skill development.

3603. Ceramics II (formerly 2623) 3(2-4)

Prerequisite: ART 2613 or consent of instructor.

Intermediate studio practices in handbuilding or wheelthrowing techniques and design with instruction in glazing and firing.

3613. Ceramics III 3(2-4)

Prerequisite: ART 3603 or consent of instructor.

Selected studio problems in handbuilding and throwing techniques with emphasis on combining the two techniques. An understanding of ceramic raw materials and basic glaze will be developed.

3703. Graphic Design II, Print Design (formerly 2723) 3(2-4)

Prerequisite: ART 2713 or consent of instructor.

In-depth exploration of the production of vector and raster graphics. Projects ranging from the creation of logos to the creation of social awareness campaigns. Continuation of the development of print production and presentation skills.

3713. Graphic Design III, Publication Design 3(2-4)

Prerequisite: ART 3703 or consent of instructor.

Introduction to the role of graphic designers in the layout and design of publications. Practices and technologies used to create multi-page publications. Exploration of typographic forms and applications.

3813. Metals II 3(2-4)

Prerequisite: ART 2813 or consent of instructor.

The continued development of metalsmithing skills and design in various non-ferrous metals. Minimum of four of the following techniques are covered: rivets, soldering, piercing, casting, enameling, raising, die-forming, and stone-setting.

3823. Metals III 3(2-4)

Prerequisite: ART 3813 or consent of instructor.

Advanced study in various metalsmithing processes and skill development with emphasis on continued individual exploration of design, ideas, and skill development.

3913. Professional Practices 3 (3-0)

Prerequisites: Art majors only. Consent of instructor.

Practical and philosophical aspects concerned with success outside of the academic environment. A survey of information centering on career opportunities, interviewing, business and professional concerns, this course will involve in-class and outside-of-class activities, discussions, and assignments.

4013. Photography IV 3(2-4)

Prerequisite: ART 3023 or consent of instructor.

This course will explore color photography as a fine arts medium. Experimental approach to color will be explored. These approaches will include cliché vére, non silver, dye transfer, and electronic imaging.

4023. Photography V 3(2-4)

Prerequisite: ART 4013 or consent of instructor.

This course will explore advanced techniques of both black and white and color. The course will introduce students to the 4x5 camera and studio lighting. Each student will pursue his or her individual creative path culminating in a final portfolio. May be repeated for credit.

4113. Photography in Great Britain 3(3-0)

This is the lecture component of the class where historical and contemporary photographic practices in Great Britain will be addressed. London's museums, galleries, and institutions such as the Royal Photographic Society will be utilized; important British photographers will be invited to class to discuss their work. Field trips to such locations as Stonehenge and Laycock Abbey will be an integral part of the course. Each student will compile a photographic portfolio as a final project.

4123. Photography in Great Britain 3(2-4)

This is the studio component of the class where historical and contemporary photographic practices in Great Britain will be addressed. London's museums, galleries, and institutions such as the Royal Photographic Society will be utilized; important British photographers will be invited to class to discuss their work. Field trips to such locations as Stonehenge and Laycock Abbey will be an integral part of the course. Each student will compile a photographic portfolio as a final project.

4143. Printmaking IV 3(2-4)

Prerequisite: ART 3153 or consent of instructor.

Selected studio problems with emphasis on combining or mixing media. Stressing individual development and production.

4153. Printmaking V 3(2-4)

Prerequisite: ART 4143 or consent of instructor.

Further emphasis in individual development of image and technique stressing production of prints to be included in the Senior Exhibition. May be repeated for credit.

4163. Domestic/International Field Study 3(2-4)

Prerequisite: Consent of instructor.

Studies away from MSU campus in studio art and art history. Will include preparatory class meetings before travel and at the conclusion of experience. May be repeated for credit when topics and instructors vary.

4213. Drawing IV 3(2-4)

Prerequisite: ART 1323 or consent of instructor.

The development of personal attitudes towards drawing. Designed to deal with individual problems and concepts.

4223. Drawing V 3(2-4)

Prerequisite: ART 4213 or consent of instructor.

Continuation of ART 4213.

4233. Drawing VI 3(2-4)

Prerequisite: ART 4223 or consent of instructor.

Continuation of ART 4223.

4303. Foundations of Art Education I 3(2-4)

A study of the essential elements of fine arts as outlined by the Texas Education Agency. The course provides experience in the value of art, art judgment, creativity, and awareness of

art fundamentals. It also combines experience in working with both two- and three-dimensional media with reading and research in art.

4313. Painting IV 3(2-4)

Prerequisite: ART 3323 or consent of instructor.

Selection of media previously investigated. Individual exploration of ideas focused; techniques and skills refined.

4323. Painting V 3(2-4)

Prerequisite: ART 4313.

Selection of media previously investigated. Consistency of imagery, idea, and refinement of technical skill expected. Production of paintings to be included in Senior Exhibition. May be repeated for credit.

4403. Foundations of Art Education II 3(2-4)

Prerequisites: ENGL 1113 and 1123.

A study of the philosophy, organization, and theory related to art programs. Focuses on the development of curriculum and lesson plan organization. Also provides field observation and teaching experience.

4413. Art of the European Renaissance 1300-1600 3(3-0)

Art and architecture examined for style, cultural meaning, context, and ideology. Investigation of conditions of art production, change in role of artist, relationship between theory and practice, and the question or concept of Renaissance. Italy, France, Germany, and southern and northern Netherlands.

4423. Art in Early Modern Europe I: Art from 1600-1750 3(3-0)

Exploration of art and architecture of Europe from the Counter-Reformation shrine of St. Peter to Louis XIV's palace at Versailles; from the Jesuit altarpieces in Antwerp to the Dutch Republic of Vermeer and Rembrandt, and more. Italy, Spain, France, Germany, England, Flanders, Netherlands.

4433. Art in Early Modern Europe II: Art from 1750-1900 3(3-0)

An investigation of the visual arts and architecture in Europe from the stirrings of revolution in the late eighteenth century to the new age of imperialism that reached its apogee before World War I. Neoclassicism, Romanticism, Historicism, Realism, Impressionism, Post-Impressionism, Symbolism, Art Nouveau.

4443. Modern and Contemporary Art 3(3-0)

Investigation of the visual arts and architecture from Post-impressionism to the present. Special emphasis on cultural definitions of modernity and modernism, the ideologies of the avant-garde, and the ideas and issues surrounding the production, reception, marketing, interpretation, and criticism of painting, sculpture, drawing, photography, installations, performance, video, and other mixed media modes of presentation. International in scope.

4453. Art in the United States 3(3-0)

Investigation of the role visual culture has played in the United States as Americans attempted to situate themselves geographically, culturally, economically, and politically within their own society and within the world at large. Traces change within the visual arts in the context of important social, political, and intellectual events from ca. 1600 to 1945.

4463. **African Art** 3(3-0)
 Examination of the rich heritage of visual and performing arts across Africa as they shape and have been shaped by the histories and cultural values (social, political, religious, philosophical, aesthetic) of diverse African peoples. Traces histories of change resulting from the impact of outside/Western contact, including colonization, religious conversion, and the availability of new materials and processes.
4513. **Exhibition and Presentation Methods** 3 semester hours
 Prerequisite: Consent of instructor.
 A practicum in the fundamentals of exhibition organization. Emphasis on gallery installation and advanced presentation skills beyond the studio experience. May be repeated for credit.
4533. **Topics in the History of Art** 3(3-0)
 Survey and investigation of a particular topic, problem, or issue in art history with emphasis on those not covered in other courses (e.g., issues in contemporary art, Mesoamerican art before the conquest; women in art; history of museums and collecting; problems in methodology; history, criticism, theories of photography; etc.). Exact content will be announced before each offering. May be repeated once for credit.
4543. **Topics in Studio Art** 3(3-0)
 Prerequisites: ART 1113, 1123, 1313, 1323 or consent of instructor.
 Advanced study of various disciplines of studio art. Studio offerings will be outside of mainstream courses, and will not be credited to established areas of major and minor study. May be repeated for credit when topics and instructors vary. Advanced art hour credit.
4553. **Sculpture IV** (formerly 3633) 3(2-4)
 Prerequisite: ART 3533 or consent of instructor.
 Advanced study in various processes with emphasis on combining materials. Stress placed on individual development of ideas and a refinement in techniques and skills.
4563. **Sculpture V** (formerly 4623) 3(2-4)
 Prerequisite: ART 4553 or consent of instructor.
 Further emphasis in individual development of techniques and concept. Stress placed on production of works to be included in the Senior Exhibition. May be repeated for credit.
4603. **Ceramics IV** (formerly 4523) 3(2-4)
 Prerequisite: ART 3613 or consent of the instructor.
 Advanced individual problems in clay construction and design with an emphasis on the development of personal direction. Problems in non-utilitarian forms with consideration for the technical problems inherent to the process and materials selected by the student.
4613. **Ceramics V** 3(2-4)
 Prerequisite: ART 4603 or consent of instructor.
 Advanced individual problems in clay construction and design with further emphasis on the development of a personal direction stressing production of works suitable for use in the Senior Exhibition. May be repeated for credit.
4703. **Graphic Design IV, Animation** (formerly 3723) 3(2-4)
 Prerequisite: ART 3713 or consent of instructor.
 Three-dimensional and animation design. Use of storyboards and skills involving interface design. Special attention to concept design and creative problem solving.

- 4713. Graphic Design V, Web Development** 3(2-4)
 Prerequisite: ART 4703 or consent of instructor.
 Introduction to Web-page and site development. Preparation of individual projects. Emphasis on team approaches to solving complex design problems.
- 4733. Graphic Design VI, Portfolio Design** (formerly 4723) 3(2-4)
 Prerequisite: ART 4713 or consent of instructor.
 Creation of a portfolio. Refinement of existing projects and creation of new projects to ensure a substantial portfolio. Creation of self-promotional materials to accompany the print portfolio.
- 4813. Metals IV** 3(2-4)
 Prerequisite: ART 3823 or consent of instructor.
 Advanced study in various metalsmithing processes with emphasis on combining processes and stressing individual exploration of contemporary metals design and skill development.
- 4823. Metals V** 3(2-4)
 Prerequisite: ART 4813 or consent of instructor.
 Advanced individual problems in metals with emphasis on the development of a personal direction stressing production of works to be included in the Senior Exhibition. May be repeated for credit.
- 4913. Independent Study** 3 semester hours
 Prerequisites: Nine hours in the field to be investigated.
 Individual student scholarship with faculty guidance. May be repeated for credit.
- 4923. Senior Exhibition** 3 (2-4)
 Prerequisite: Consent of instructor.
 Special emphasis on all aspects of preparation for the selection and presentation of work included in the senior exhibition. Includes production of resume, artist's statement, exhibition announcement, public relations practices, and various forms of correspondence and communication. For B.F.A. majors only. To be taken during final semester. Instructor oversees all aspects of every senior exhibition.
- 4933. Visual Arts Apprenticeship** 3 semester hours
 Prerequisite: Consent of department chair and instructor.
 Practical work experience related to student's career objectives. Students may apprentice under an art faculty specialist or an approved professional in the field. The maintenance of a weekly log, a written report, and a faculty/supervisor evaluation are required. May be repeated in different environments for a total of six hours credit.



MASS COMMUNICATION

James Sernoe, Chair (Fain Fine Arts Center B110)

Associate Professor: Sernoe

Assistant Professors: Gorham, Lewis

Instructors: Grant, Minden

Professors Emeriti: Allen, Cowart, Kable, Pruitt

MISSION STATEMENT FOR THE MASS COMMUNICATION PROGRAM

The mission of the Mass Communication program is to prepare Bachelor of Arts graduates for employment in the multi-discipline media arena and/or graduate education. The mission will be achieved by evolving curriculum that stresses both theoretical principles and practical application of current theory.

BACHELOR OF ARTS degree requirements

The purpose of the mass communication program is to prepare graduates for careers in a multi-faceted media profession, for graduate education, and for life-long learning in a rapidly changing global and technological environment.

The requirements for the degree of Bachelor of Arts with a major in mass communication are as follows:

Academic Foundations and Core Curriculum plus additional requirements **55-57**

ENGL 1113, 1123	6
SPCH - met by course required in major	0
HIST 1133, 1233	6
POLS 1333, 1433	6
Natural Sciences	6-8
MATH 1053 or 1233	3
Fine Arts - met by course required in major	0
Humanities - ENGL sophomore literature or humanities	6
SOCL 1133 or PSYC 1103	3
ECON 1333 or 2333 or 2433	3
Foreign Language – 14 hours of one foreign language	14
Exercise Physiology (2 different activity courses or one semester of marching band and 1 activity, or two semesters of marching band)	2

Computer Competency Requirement **0-3**

EDUC 1023, CMPS 1013, 1033, or pass department exam	0-3
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Writing Proficiency Requirement

Graduation requirements at Midwestern State University include passing the Writing Proficiency Exam, to be taken after the student has completed 60 hours of coursework. Not passing the exam requires taking and passing ENGL 2113 – Composition Skills.

Major in Mass Communication 39

MCOM	1233	Introduction to Mass Communication	3
MCOM	1243	News Writing and Reporting I	3
MCOM	2213	Appreciation of Film	3
MCOM	3223	Advertising	3
MCOM	3313	Electronic News Gathering	3
MCOM	3613	Television Production	3
MCOM	3733	Media Ethics	3
MCOM	4183	Internship	3
MCOM	4243	Senior Production	3
(A 3.0 grade point average in the major and minor is required prior to enrollment in MCOM 4243.)			
MCOM	4313	Media Management	3
MCOM	4323	Web Site Design	3
MCOM	4643	Mass Communication Law	3
SPCH	2423	Interpersonal Communication	3

Minor (Mass communication majors must complete one of the following minors.) 18**Broadcasting:**

MCOM	3623	Mass Communication History
MCOM	4223	Computer Assisted Reporting
MCOM	4263	Broadcast News I
MCOM	4363	Broadcast News II
MCOM	4423	Multimedia Design
MCOM	4533	Advanced Reporting/Writing

Digital Media:

MCOM	3253	Publication Design
MCOM	3523	The Internet and Society
MCOM	4223	Computer Assisted Reporting
MCOM	4423	Multimedia Design
MCOM	4533	Advanced Reporting/Writing

3 hours from:

MCOM	3623	Mass Communication History
MCOM	4163	Newspaper Practicum

Journalism:

MCOM	3233	Editing
MCOM	3253	Publication Design
MCOM	3623	Mass Communication History
MCOM	4163	Newspaper Practicum
MCOM	4223	Computer Assisted Reporting
MCOM	4533	Advanced Reporting/Writing

Public Relations and Advertising:

MCOM	3233	Editing
MCOM	3253	Publication Design
MCOM	3823	Creation of the Advertising Message
MCOM	4673	Public Relations Writing

MCOM 4683 Public Relations Principles
 MCOM 4823 Integrated Marketing Communication

Advisor-Approved Electives 3-8
Total Semester Hours 120

Minor in Mass Communication (18 semester hours)

MCOM 1233 Introduction to Mass Communication
 MCOM 1243 News Writing and Reporting I
 MCOM 3223 Advertising
 MCOM 3313 Electronic News Gathering
 MCOM 4683 Public Relations Principles

Choose one from:

MCOM 3733 Media Ethics
 MCOM 4313 Media Management
 MCOM 4643 Mass Communication Law

COURSES IN MASS COMMUNICATION (MCOM)

1233. Introduction to Mass Communication (TCCNS = COMM 1307) 3(3-0)

Survey of the mass communication process and mass media, including print media, radio/recording, television, Internet, and emerging media. Students will learn about media issues, societal effects and trends.

1243. News Writing and Reporting I (TCCNS = COMM 2311) 3(2-2)

Prerequisite: Cannot be enrolled concurrently with MCOM 3313.

A workshop course focusing on news reporting and writing techniques used in both traditional print media and Internet publishing. Students will be introduced to the basics of accuracy, clarity, word choice, journalistic style, story structure, and deadlines. Coverage of on-campus news events is supplemented by deadline writing exercises in a classroom laboratory.

2213. Appreciation of Film (TCCNS = COMM 2366) 3(3-0)

The history, theory, and aesthetics of film as artistic expression. Cinematography, editing, script, and genres will be emphasized.

3133. News Writing and Reporting II 3(2-2)

Prerequisite: MCOM 1243.

News gathering and news writing for complex stories. In-depth reporting and writing are stressed using principles and techniques taught in News Writing and Reporting I.

3223. Advertising 3(3-0)

Prerequisite: Junior standing.

Study of the communication process advertisers use to sell goods, services, and ideas. Emphasis on principles and techniques used to develop campaigns and reach audiences, including the concepts of target marketing, market segmentation, brand positioning, and advertising appeals.

3233. **Editing** 3(3-0)
Prerequisite: MCOM 1243.
Instruction and practice in reading copy and editing in a variety of formats. Builds upon skills introduced in MCOM 1243.
3253. **Publication Design** 3(3-0)
Prerequisite: MCOM 1243.
The use of layout and design principles to create eye-appealing and readable newspapers, magazines, newsletters, brochures, and flyers. Theoretical and practical applications of graphics and electronic picture editing are incorporated into the course.
3313. **Electronic News Gathering** 3(3-0)
Prerequisite: Cannot be enrolled concurrently with MCOM 1243.
This course focuses on the specialized style of journalistic writing used in the broadcast media. This class also provides students with the opportunity to operate cameras and editing equipment, and produce a mini-newscast.
3503. **Cross-Cultural Communication** 3(3-0)
Prerequisite: Consent of the instructor.
A survey of concepts, issues, and developments in international communication, including the economic, political, structural, and societal contexts in which the communication and information industries interact with their various constituencies.
3513. **Special Topics in Mass Communication** 3(3-0)
Prerequisite: Consent of the instructor.
Focused seminar dealing with varying subjects in mass media. May be repeated for credit with different topics.
3523. **The Internet and Society** (formerly 2523) 3(3-0)
This course examines the personal, academic, media, and business uses of the Internet. Applying practical and theoretical concepts, including social media use, students will study the mutual interaction of computers and other new technologies, the Internet, society, and the struggles for control/ownership of the World Wide Web and its content.
3613. **Television Production** 3(3-0)
Prerequisite: MCOM 3313.
This course provides students with the opportunity to develop skills in the technical elements of television equipment use and production techniques. Students will take a start-to-finish approach to producing and directing various projects.
3623. **Mass Communication History** 3(3-0)
Prerequisite: MCOM 1233.
Study of the development of mass communication beginning with early attempts at print media and continuing to present developments. Emphasis on connecting events of their time with events of today and understanding developments within their political, social, economic, and cultural contexts.
3633. **Editorial Writing** 3(3-0)
Prerequisite: MCOM 1243.
The study and writing of editorials, opinion pieces, and personal columns for newspapers, magazines, and digital media.

3653. **Feature Writing** 3(3-0)
Prerequisite: MCOM 1243.
Analysis and writing of feature stories for newspapers, magazines, and digital media. Ideas, information gathering, and story structure are emphasized.
3733. **Media Ethics** 3(3-0)
Prerequisites: MCOM 1233 and junior standing.
Study of ethical philosophies and their applications to current and historical situations involving the mass media.
3823. **Creation of the Advertising Message** 3(3-0)
Prerequisite: MCOM 3223.
Application of advertising principles and techniques to develop an advertising campaign, creative strategy, and creative executions for different media. Ad concept development, design, and copywriting will be emphasized.
4163. **Newspaper Practicum** 3 semester hours
Prerequisites: MCOM 1243; consent of the instructor.
Writing for campus newspaper in a professional atmosphere. May be repeated once for credit.
4173. **Independent Study in Mass Communication** 3 semester hours
Prerequisite: Consent of instructor.
Individual student scholarship with faculty guidance. May be repeated for credit.
4183. **Internship** 3 semester hours
Prerequisites: MCOM 1243, 3313, junior standing, and consent of instructor.
Practical experience in a professional setting. Student must complete at least 120 hours of hands-on work for the employer. Must have department internship coordinator's consent before beginning internship. May be repeated once for credit with a different employer.
4223. **Computer Assisted Reporting** 3(2-2)
Prerequisites: MCOM 1243, 3313.
The use of computers, databases, and the Internet to develop meaningful and complex stories. Emphasis is placed on finding raw data, interpreting it, organizing it, and writing stories for publication. The course deals with critical thinking and the methodology of using computers as a journalistic tool.
4243. **Senior Production** 3(3-0)
Prerequisites: MCOM 3613, 4183. Limited to graduating mass communication seniors with a 3.0 G.P.A. in the major and minor. Consent of instructor and department chair.
The execution of a television documentary incorporating written, oral, and organizational skills. Emphasis on applied media aesthetics. To be taken in final long semester.
4263. **Broadcast News I** 3 semester hours
Prerequisite: MCOM 3613.
Gathering, writing, and presenting a television news product under a deadline. Developing news judgment, understanding of the complexities of the visual aspect of broadcast journalism, and ethics are stressed.
4313. **Media Management** 3(3-0)
Prerequisites: MCOM 1243, 3313, and junior standing.

Study of the financial, legal, technical, operational, programming, production, and personnel aspects of managing a media organization.

4323. Web Site Design 3(3-0)

Prerequisites: MCOM 1243, 3313.

Students will learn the concepts of planning, constructing, and organizing web pages into a cohesive unit. Students will also learn to lay out text images, as well as edit and upload the pages to the Internet.

4363. Broadcast News II 3 semester hours

Prerequisite: MCOM 4263.

Building on a variety of skills acquired in MCOM 4263, this class focuses on broadcast performance, production, ethics, and non-linear editing.

4423. Multimedia Design 3(3-0)

Prerequisites: MCOM 1243, 3313.

Students will learn the basics of integrating several media into the Internet, including print, audio, video, and graphics. Emphases will include technical proficiency in various software applications, aesthetic considerations, and understanding new technologies.

4463. Broadcast News III 3 semester hours

Prerequisite: MCOM 4363.

Building on a variety of skills acquired in MCOM 4363, this class focuses on broadcast performance, production, ethics, and non-linear editing.

4533. Advanced Reporting/Writing 3(3-0)

Prerequisites: MCOM 1243, 3313, and 3613.

Advanced course designed to improve students' skills in writing and reporting for print, broadcast, and web applications.

4643. Mass Communication Law 3(3-0)

Prerequisites: MCOM 1233 and junior standing.

Overview of how mass communication law works in this country with an emphasis on the 1st Amendment, free expression, and legal theory. Students will also study such narrow areas of media law as libel and obscenity.

4673. Public Relations Writing 3(3-0)

Prerequisite: MCOM 1243.

Students will learn to write from an organizational perspective for a variety of public relations purposes and publications, including newsletters, press releases, fact sheets, and backgrounders.

4683. Public Relations Principles 3(3-0)

Prerequisite: MCOM 1243.

Study of public relations' historical and theoretical contexts, as well as public relations' role in solving organizational problems and concerns.

4693. Public Relations Campaigns 3(3-0)

Prerequisites: MCOM 4673 and 4683.

Analysis and evaluation of public relations cases and applications of PR principles to develop a PR campaign. Students will learn to research PR problems, develop action plans, and implement and evaluate public relations campaigns.

4823. Integrated Marketing Communication 3(3-0)

Prerequisites: MCOM 3223, 3823, and 4683.

Application of advertising and PR principles to develop a comprehensive campaign for a specified client. Students develop research, strategic planning and decision-making skills.

DIGITAL MEDIA

Requirements for Minor in Digital Media (18 semester hours)

MCOM 1233 Introduction to Mass Communication
 MCOM 1243 News Writing and Reporting I
 MCOM 3313 Electronic News Gathering
 MCOM 3523 The Internet and Society

Choose two from:

MCOM 3253 Publication Design
 MCOM 4223 Computer Assisted Reporting
 MCOM 4323 Web Site Design
 MCOM 4423 Multimedia Design

JOURNALISM

Requirements for Minor in Journalism (18 semester hours)

MCOM 1233 Introduction to Mass Communication
 MCOM 1243 News Writing and Reporting I
 MCOM 3233 Editing
 MCOM 3253 Publication Design
 MCOM 3733 Media Ethics
 MCOM 4163 Newspaper Practicum

PUBLIC RELATIONS AND ADVERTISING

Requirements for Minor in Public Relations and Advertising (18 semester hours)

MCOM 1243 News Writing and Reporting I
 MCOM 3223 Advertising
 MCOM 3823 Creation of the Advertising Message
 MCOM 4673 Public Relations Writing
 MCOM 4683 Public Relations Principles

3 hours from:

MCOM 3233 Editing
 MCOM 3253 Publication Design
 MCOM 3733 Media Ethics
 MCOM 4323 Web Site Design
 MCOM 4823 Integrated Marketing Communication

SPEECH COMMUNICATION

The Department of Mass Communication also offers courses in speech communication.

COURSES IN SPEECH COMMUNICATION (SPCH)

1133. **Fundamentals of Speech Communication** (TCCNS = SPCH 1315) 3(3-0)
 Study of basic concepts of speech communication as applied to public speaking. Develops skills in research, preparation, delivery, and critiques of oral speeches. Skills are demonstrated through classroom work.
1233. **Voice and Diction** (TCCNS = SPCH 1342) 3(3-0)
 A course for students wishing to improve their speaking voices and gain greater control over their pronunciation of spoken English. The anatomy of the vocal mechanisms and the International Phonetic Alphabet are studied for practical application in the improvement of voice and diction. This course is performance oriented.
2423. **Interpersonal Communication** (TCCNS = SPCH 1318) 3(3-0)
 Introduces interpersonal communication concepts and provides speech interaction in one-to-one and small-group situations. Explores group dynamics, communication barriers, conflict resolution, decision making, interpersonal perception, and listening skills.
3023. **Persuasion** 3(3-0)
 Prerequisite: SPCH 1133, 1233, or 2423.
 Study of persuasive theory and approaches to attitude and behavior change. Explores processes and techniques used in various forms of persuasive messages. Develop skills in persuasive speaking.
4143. **Independent Study in Speech Communication** 3 semester hours
 Prerequisites: SPCH 1133, 1233, or 2423, junior standing, and consent of the instructor.
 Intensive study for the advanced student within a special area of speech communication. Topics will be selected by the student with instructor approval. May be repeated for credit when topics vary.

MUSIC

Timothy Justus, Chair (Fain Fine Arts Center 117)
Professors: Archambo, Maxwell, Morrow, Schuppener
Associate Professors: Justus, Lewis
Assistant Professors: Black, Crews, Harvey
Professor Emeritus: Hough

MISSION STATEMENT FOR THE MUSIC PROGRAM

The mission of the music program at Midwestern State University is to provide a comprehensive music curriculum and a wide range of performance opportunities that will equip students for a variety of music careers while enabling them also to become well-rounded persons through involvement in diverse liberal arts courses. The music program endeavors to help students develop aesthetic sensibility, cultural awareness, and social

responsibility. Not only are students taught to create within their disciplines, they are challenged to evaluate the quality of what they have created. Central to the mission is to empower students to use their talents to enrich and advance society. With this in mind, the program also serves as a catalyst between the university and the community in promoting artistic activities.

The following degree programs are offered for music majors:

Bachelor of Music (Performance)

Bachelor of Music (with Teacher Certification), see page 156.

Bachelor of Arts with a major in Music

The music program is accredited by the National Association of Schools of Music through its Commission on Accreditation.

GENERAL INFORMATION

Entering students may be required to take music placement tests. Preparatory study or considerable experience in the field of performance concentration is required of all majors. Advanced standing of transfer students will be determined by placement tests and evaluation of scholastic standing.

All music majors, with the exception of keyboard majors and students pursuing the B.A. degree with a major in music, are required to maintain continuous enrollment in piano class or private piano (with approval from the chair of keyboard studies) until keyboard proficiency is passed.

All music majors must participate in at least one major ensemble for credit each semester of enrollment except during the semester of student teaching. (See list of major ensembles under Courses in Music Ensemble on page 196.)

All music majors are required to maintain continuous enrollment in their primary performance area until successfully completing the senior recital.

All music majors are required to make a grade of "C" or better in every music course required for the degree and/or major in music.

Additional information regarding Music Department policies and procedures is available in the Music Department Policy Manual.

RECITAL REQUIREMENTS

All candidates for the Bachelor of Music degree must prove satisfactory performance ability by performing publicly in recital. Students taking the performance degree will perform a half recital in the junior year, and a full recital in the senior year. Students with teacher certification will perform a half recital in the senior year.

All music majors, with the exception of keyboard majors, must pass the keyboard proficiency examination prior to the performance of their senior recital.

Before a recital is performed publicly, the student will be required to demonstrate to the faculty in his/her performance area that the program is ready for public performance. The time for this preview will be at least three weeks prior to the public performance date.

RECITAL ATTENDANCE REQUIREMENTS

Each student will be required to enroll in Recital Attendance (MUSC 1000) until eight semesters have been completed (seven semesters for students with teacher certification). This course is required for graduation but will carry no semester-hours credit toward a degree. The number of required semesters of Recital Attendance for transfer students will be determined by the Music Department Chair upon the student's entrance into the music program.

Grading will be by pass/fail. Attending a specified number of recitals will be required each semester for a passing grade. Failure to attend the requisite number of recitals will result in a failing grade for the semester.

Music performance majors must pass a minimum of eight semesters, and students with teacher certification must pass seven semesters. Students will not be cleared for graduation until these requirements are met.

UPPER LEVEL APPLIED EXAM

The Upper Level Applied Exam is a process used by the faculty of the Department of Music to determine if a student is sufficiently prepared to continue study at an advanced level, complete the degree recitals and progress toward graduation. Successful completion of the Upper Level Applied Exam is required before the student will be enrolled in 3000 level applied study.

1. In order to determine suitability for upper level study, students at the end of the fourth semester of applied study will play an extended jury (double jury) in which he/she demonstrates mastery of the requirements listed for upper level study in the *Department of Music Handbook* pages 17-19, for their category of applied study.
2. Transfer students with two previous years of applied study will be allowed to register for upper level study with the approval of the applied instructor following an audition at which two faculty from their applied area are present.
3. At the beginning of the fourth semester of applied study at a time to be arranged by the faculty, students anticipating the upper level applied examination will be interviewed briefly by the faculty as part of the barrier exam process. The interview will be used to inform the student of the requirements of the exam, determine any possible impediments to the student's taking the exam, and generally assess the student's progress toward the degree. During this interview, the student may ask questions about the examination or ask the faculty for clarification of any curricular or degree programs.

REQUIREMENTS FOR THE MINOR IN MUSIC (18-19 semester hours, including 9 advanced hours):

All students selecting a minor in music must have their program approved before registration by the Music Minor Advisor.

MUSC 1000 Recital Attendance (4 semesters)	0
MUSC 1601, 1603 Elem Sight-Singing & Ear Training/Music Theory I	4

MUSC 3743 Western and World Music II	3
MUSC: Major Ensemble (1 semester at 1000-level; 2 semesters at 3000-level; 1 semester at 4000-level)	4
Applied Music – Primary (2 semesters at 1__1-level; 2 semesters at 2__1-level) (concurrent enrollment in major ensemble)	4
3-4 hours from:	3-4
MUSC 1611, 1613 Elem Sight-Singing & Ear Training/Music Theory II	
MUSC 3733 Western and World Music I	
MUSC 3753 Western and World Music III	
MUSC 4813 Foundations of Music I	
MUSC 4823 Foundations of Music II	
MUSC 4843 Basic Conducting	
MUSC 4873 Foundations of Music III	

REQUIREMENTS FOR THE BACHELOR OF MUSIC DEGREE:

The Bachelor of Music degree focuses on preparing students for careers in performance, in church music, and as private teachers.

Primary Performance Areas: Brass, Percussion, Woodwinds, Guitar, Voice, Keyboard, Strings (with teacher certification only).

Academic Foundations and Core Curriculum 36-40

ENGL 1113, 1123	6
SPCH 1133, 1233, or 2423	3
HIST 1133, 1233	6
POLS 1333, 1433	6
Natural Sciences - two laboratory courses	6-8
MATH 1053 or 1233	3
(Students seeking teacher certification should take MATH 1233.)	
Fine Arts - met by course required in major	0
Humanities - met by courses required in major	0
SOCL 1133 or PSYC 1103	3
ECON 1333 or 2333 or 2433	3
Exercise Physiology (2 different activity courses or 1 semester of marching band and 1 activity, or 2 semesters of marching band)	0-2
For instrumental performance, requirement is met by courses in the major.	
Vocal and keyboard performance majors must meet Exercise Physiology requirement.	

Computer Competency Requirement 0-3

EDUC 1023, CMPS 1013, or 1033, or pass department exam (Students seeking teacher certification should take EDUC 1023.)	0-3
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Writing Proficiency Requirement

Graduation requirements at Midwestern State University include passing the Writing Proficiency Exam, to be taken after the student has completed 60 hours of coursework. Not passing the exam requires taking and passing ENGL 2113 – Composition Skills.

Major in Music – Instrumental Performance 80-84

MUSC 1601, 1603 Elem Sight-Singing & Ear Training/Music Theory I	4
MUSC 1611, 1613 Elem Sight-Singing & Ear Training/Music Theory II	4
MUSC 2603 Music Theory III	3
MUSC 2613 Music Theory IV	3
MUSC 3632 Analysis of Musical Form	2
MUSC 3662 Orchestration	2
MUSC 3733 Western and World Music I	3
MUSC 3743 Western and World Music II	3
MUSC 3753 Western and World Music III	3
MUSC 3823 Pedagogy of Music	3
MUSC 4843 Basic Conducting	3
MUSC 4853 Instrumental Conducting	3
MUSC 3893 Music Technology	3
Applied Music – Primary (2 semesters at 1__2-level; 2 semesters at 2__2-level; 2 semesters at 3__2-level)	12
AMUS 3862 Junior Recital	2
AMUS 4962 Senior Recital	2
Applied Music – Secondary (2 semesters at 1__1-level; 2 semesters at 2__1-level)	4
MUSC: Major Ensemble (2 semesters at 1000-level; 2 semesters at 2000-level; 2 semesters at 3000-level; 2 semesters at 4000-level)	8
MUSC: Secondary Ensemble (2 semesters at 1000-level; 2 semesters at 2000-level)	4
MUSC 1000 Recital Attendance (8 semesters)	0
Piano Proficiency (sufficient hours to pass proficiency examination):	0-4
MUSC 1111/1121, AMUS 1231 Beginning Piano/Piano Class/Piano Proficiency	
MUSC/AMUS Advanced Electives	9

Total Semester Hours 116-127

(If necessary, additional elective hours to bring total to 120.)

Major in Music – Vocal Performance 81-85

MUSC 1601, 1603 Elem Sight-Singing & Ear Training/Music Theory I	4
MUSC 1611, 1613 Elem Sight-Singing & Ear Training/Music Theory II	4
MUSC 2603 Music Theory III	3
MUSC 2613 Music Theory IV	3
MUSC 3632 Analysis of Musical Form	2
MUSC 3662 Orchestration	2
MUSC 3733 Western and World Music I	3
MUSC 3743 Western and World Music II	3
MUSC 3753 Western and World Music III	3
MUSC 4843 Basic Conducting	3
MUSC 4863 Choral Conducting	3
MUSC 3893 Music Technology	3
AMUS 1202, 2202, 3202 Voice (2 semesters at 1000-level; 2 semesters at 2000-level; 2 semesters at 3000-level)	12
AMUS 3862 Junior Recital	2
AMUS 4962 Senior Recital	2

MUSC 1001, 2001, 3001, 4001 University Singers (2 semesters at 1000-level; 2 semesters at 2000-level; 2 semesters at 3000-level; 2 semesters at 4000-level)	8
MUSC 1000 Recital Attendance (8 semesters)	0
MUSC 1211, 1221, 3211, 3221 Diction I, II, III, and IV	4
MUSC 4833 Vocal Pedagogy	3
MUSC 1931, 2931, 3931, 4931 Opera Workshop (1 semester at 1000-level; 1 semester at 2000-level; 1 semester at 3000-level; 1 semester at 4000-level)	4
FREN 1134/1234 Elementary French or GERM 1134/1234 Elementary German	8
Piano Proficiency (sufficient hours to pass proficiency examination):	0-4
MUSC 1111/1121, AMUS 1231 Beginning Piano/Piano Class/Piano Proficiency	
MUSC/AMUS Advanced Electives	2

Total Semester Hours **117-128**

(If necessary, additional elective hours to bring total to 120.)

Major in Music – Keyboard Performance **80**

MUSC 1601, 1603 Elem Sight-Singing & Ear Training/Music Theory I	4
MUSC 1611, 1613 Elem Sight-Singing & Ear Training/Music Theory II	4
MUSC 2603 Music Theory III	3
MUSC 2613 Music Theory IV	3
MUSC 3632 Analysis of Musical Form	2
MUSC 3662 Orchestration	2
MUSC 3733 Western and World Music I	3
MUSC 3743 Western and World Music II	3
MUSC 3753 Western and World Music III	3
MUSC 3823 Pedagogy of Music	3
MUSC 3833 Piano Pedagogy	3
MUSC 3843 Keyboard Literature	3
MUSC 4843 Basic Conducting	3
MUSC 4853 or 4863 Instrumental or Choral Conducting	3
MUSC 3893 Music Technology	3
Applied Music – Primary (2 semesters at 1__2-level; 2 semesters at 2__2-level; 2 semesters at 3__2-level)	12
AMUS 3862 Junior Recital	2
AMUS 4962 Senior Recital	2
Applied Music–Secondary (2 semesters at 1__1-level; 2 semesters at 2__1-level)	4
MUSC: Major Ensemble (2 semesters at 1000-level; 2 semesters at 2000-level; 2 semesters at 3000-level; 2 semesters at 4000-level)	8
MUSC: Secondary Ensemble (2 semesters at 1000-level; 2 semesters at 2000-level)	4
MUSC 1000 Recital Attendance (8 semesters)	0
MUSC/AMUS Advanced Electives	3

Total Semester Hours **116-123**

(If necessary, additional elective hours to bring total to 120.)

BACHELOR OF MUSIC WITH TEACHER CERTIFICATION degree requirements

The Bachelor of Music degree with teacher certification focuses on preparing students for careers in music education and certification by the Texas Board of Education (K-12, all-area).

Academic Foundations, Music requirements, and Professional Education requirements are found on page 156.

REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE:

The Bachelor of Arts degree with a major in music is intended to serve students with a music background not wanting to pursue professional degrees in performance or education, but rather to obtain a focused study of music within a liberal arts framework.

Academic Foundations and Core Curriculum plus additional requirements **58-60**

ENGL 1113, 1123	6
SPCH 1133, 1233, or 2423	3
HIST 1133, 1233	6
POLS 1333, 1433	6
Natural Sciences - two laboratory courses	6-8
MATH 1053 or 1233	3
Fine Arts - met by course required in major	0
Humanities - ENGL sophomore literature or humanities	6
SOCL 1133 or PSYC 1103	3
ECON 1333 or 2333 or 2433	3
Foreign Language – 14 hours of one foreign language	14
Exercise Physiology (2 different activity courses or one semester of marching band and 1 activity, or two semesters of marching band)	2

Computer Competency Requirement **0-3**

EDUC 1023, CMPS 1013, 1033, or pass department exam	0-3
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Writing Proficiency Requirement

Graduation requirements at Midwestern State University include passing the Writing Proficiency Exam, to be taken after the student has completed 60 hours of coursework. Not passing the exam requires taking and passing ENGL 2113 – Composition Skills.

Major in Music **39**

MUSC 1601, 1603 Elem Sight-Singing & Ear Training/Music Theory I	4
MUSC 1611, 1613 Elem Sight-Singing & Ear Training/Music Theory II	4
MUSC 2603 Music Theory III	3
MUSC 2613 Music Theory IV	3
MUSC 3733 or 3753 Western and World Music I or Western and World Music III	3
MUSC 3743 Western and World Music II	3
MUSC 4843 Basic Conducting	3
MUSC 3893 Music Technology	3
Applied Music – Primary (2 semesters at 1__1-level; 2 semesters at 2__1-level)	4

MUSC Ensemble (2 semesters at 1__1-level; 2 semesters at 2__1-level)	4
MUSC 1000 Recital Attendance (8 semesters)	0
MUSC 4943 Senior Project	3
MUSC/AMUS Advanced Electives	2
Minor - Minimum of 18 hours in any discipline	18

Total Semester Hours **115-120**
 (If necessary, additional elective hours to bring total to 120.)

While any stated minor in the current catalog may be used, one of the following is recommended for the Bachelor of Arts with a major in Music:

Vocal Performance (18 hours):

AMUS 3201 (2 semesters), 3961, 4201, MUSC 1211, 1221, 4833, Major Ensemble (2 semesters at 1000-level, 2 semesters at 2000-level), and advanced music or related field electives (5 hours).

Instrumental Performance (18 hours):

AMUS applied lessons (2 semesters at 3000-level; 1 semester at 4000-level), AMUS 3961, MUSC 4853, Major Ensemble (2 semesters at 1000-level, 2 semesters at 2000-level), Secondary Ensemble (2 semesters at 1000-level, 2 semesters at 2000-level), and advanced music or related field electives (3 hours).

Keyboard Performance (18 hours):

AMUS applied lessons (2 semesters at 3000-level; 1 semester at 4000-level), 3961, MUSC 3823, 3833, Major Ensemble (2 semesters at 1000-level, 2 semesters at 2000-level), and advanced music or related field electives (4 hours).

Journalism (18 hours): see page 188

Business Administration (21 hours): see page 111

Management Information Systems (18 hours): see page 116

COURSES IN MUSIC ENSEMBLE (MUSC)

The term “major ensemble” as used in the curricula includes University Symphonic Band, University Wind Ensemble, or University Marching Band for students concentrating in instrumental music and University Singers for students concentrating in vocal music. Students concentrating in keyboard music or guitar may select from any of the major ensembles mentioned above. Ensembles other than University Symphonic Band, University Wind Ensemble, University Marching Band, and University Singers are considered secondary, with the exception that students may be enrolled in Oratorio Chorus instead of University Singers as a major ensemble at the sole discretion of the Director of Choral Activities. All music majors must participate in at least one major ensemble for credit each semester of enrollment (minimum of 7 semester credit hours for teacher certification and 8 semester hours for performance).

1001, 2001, 3001, 4001. **University Singers** 1(0-4)

A select choral ensemble open to all students of the University who qualify by audition. At least four hours of rehearsal are required each week and members must participate in all public performances. An extended tour is taken in the spring. Choral music from all historical periods in various genres is explored and performed. The repertoire includes world music from a variety of cultures.

1011, 2011, 3011, 4011. **Oratorio Chorus** 1(0-3)

A choral organization open to all interested students and townspeople specializing in the performance of major works with orchestral accompaniment. Historical periods ranging from Renaissance to the 21st Century are varied each semester, as well as the birth origin of the individual composers, so as to provide a fresh multicultural musical experience with each major work.

1021, 2021, 3021, 4021. **University Symphonic Band** 1(0-4)

The Midwestern State University Symphonic Band is a select group representing all colleges on campus. The band tours annually and performs several concerts on campus and off campus. Membership is open to all students with band experience (spring semester).

1031, 2031, 3031, 4031. **University Pep Band** 1(0-2)

The Midwestern State University Pep Band meets twice weekly during the spring semester and performs for all home basketball games and selected outdoor activities. Membership is open to all students with band experience (spring semester).

1041, 2041, 3041, 4041. **University Marching Band** 1(0-6)

A group which represents all colleges on campus. During the fall semester, the band performs at MSU home football games. Membership is open to all students with band experience. One hour of credit is given each semester. Two hours credit may be substituted for the exercise physiology activity requirement. May be repeated for credit (fall semester only).

1061, 2061, 3061, 4061. **Wichita Falls Chamber Orchestra** 1(0-2)

A large instrumental ensemble open to all interested students and townspeople. Membership is by audition. Fall and spring concerts are presented. Additional concerts for the community are scheduled as needed. Literature ranges from baroque to contemporary classics (fall and spring semesters).

1071, 2071, 3071, 4071. **University Wind Ensemble** 1(0-4)

The Midwestern State University Wind Ensemble is a select group representing all colleges on campus. The ensemble tours annually and performs several concerts on campus and off campus. Membership is open to all students with band experience who qualify by audition (spring semester).

1931, 2931, 3931, 4931. **Opera Workshop** (TCCNS = MUSI 1157/1158) 1 semester hour

An ensemble open to all students by audition. Trains singers and directors in the special problems of the musical stage (spring semester).

1941, 2941, 3941, 4941. **University Jazz Ensemble** 1(0-3)

An instrumental ensemble representing students from all colleges on campus. The band tours each year and performs for local high school assemblies and civic club programs. Membership is by audition (fall and spring semesters).

1961, 2961, 3961, 4961. **Chamber Ensemble** 1 semester hour

Small ensembles devoted to the learning and performing of all styles of chamber music. Membership is by audition (fall and spring semesters).

1981, 2981, 3981, 4981. **Midwestern Singers** 1 semester hour

A chamber ensemble selected by audition from members of the University Singers. The Midwestern Singers perform a wide variety of music from different countries, ranging from madrigals and motets to vocal jazz arrangements from America and abroad.

COURSES IN APPLIED MUSIC – PERFORMANCE (AMUS)

Courses in performance (private lessons) are available for one or two semester hours credit. Performance course numbers have a first digit of 1, 2, 3, or 4 corresponding to the level of study. The final digit corresponds to the number of semester hours in which a student is enrolled. The central digits show the area of performance study (piano, voice, non-major voice, etc.) according to the table below.

Students majoring in performance as candidates for the Bachelor of Music degree may enroll for no more than three semester hours in their primary performance area each semester. Candidates for the Bachelor of Music degree with Teacher Certification, music minors, and non-majors/non-minors may enroll for no more than one semester hour each semester.

	Central Digits for Performance Area
Performance Area:	
Voice	20
Voice for non-majors/non-minors	70
Keyboard	
Piano	22
Piano Proficiency (repeat once only—two semesters total)	23
Organ	24
Harpsichord	28
Keyboard for non-majors/non-minors	72
Percussion	26
Strings	
Guitar	38
Strings	39
Winds	
Flute	40
Oboe	42
Clarinet	44
Saxophone	46
Bassoon	48
Brasses	
French Horn	50
Trumpet (Cornet)	52
Trombone	54
Baritone	56
Tuba	58
Instrumental for non-majors/non-minors	74
Conducting	60
Composition	69
Junior Recital, Performance	86
Senior Recital, Performance, Education, or B.A. music majors	96

Voice, piano, or instrumental for non-majors may be taken only with consent of instructor and department chair.

COURSES IN MUSIC (MUSC)

1033. **The Appreciation of Music** (TCCNS = MUSI 1306/1310) 3(3-0)
 A course designed to increase the variety and depth of the student's exposure to music and to enhance understanding and enjoyment of music as an art. Offered as traditional music appreciation or jazz/rock music appreciation.
1111. **Beginning Piano** (TCCNS = MUSI 1181) 1(0-2)
 Class instruction in piano for students with no previous background; emphasis on the development of fundamental skills. Majors/minors only. May be repeated for credit.
1121. **Piano Class** (TCCNS = MUSI 1182) 1(0-2)
 Prerequisite: Ability to read treble and bass clefs.
 Emphasis on basic skills to pass the piano proficiency. Majors/minors only. May be repeated for credit.
1211. **Diction I** (TCCNS = MUSI 1162) 1 semester hour
 A beginning course for the study of singers' diction. The International Phonetic Alphabet will be learned and applied to English, Italian, and Latin pronunciation.
1221. **Diction II** (TCCNS = MUSI 1165) 1 semester hour
 A beginning course for the study of German and French pronunciation. The International Phonetic Alphabet will be learned and applied.
1503. **Basic Music** 3(3-0)
 A study of the basic elements of music theory, including the reading of musical notation on treble and bass staves, key signatures, scales, and chords.
1601. **Elementary Sight-Singing and Ear Training** (TCCNS = MUSI 1116) 1(0-2)
 Prerequisite: MUSC 1503 or consent of instructor.
 Singing in treble and bass clefs with introduction to alto clef, major, and minor modes. Recognition of intervals and triads and melodic dictation. Enrollment limited to students who are enrolled in or have completed MUSC 1603.
1603. **Theory I** (TCCNS = MUSI 1311) 3(3-0)
 Prerequisite: MUSC 1503 or consent of instructor.
 Part writing of figured bass exercises and melody harmonizations using triads. Composing on a small scale will be introduced. MUSC 1601 should be taken concurrently.
1611. **Elementary Sight-Singing and Ear Training** (TCCNS = MUSI 1117) 1(0-2)
 Prerequisite: MUSC 1601.
 A continuation of MUSC 1601. Enrollment limited to students who are enrolled in or have completed MUSC 1613.
1613. **Theory II** (TCCNS = MUSI 1312) 3(3-0)
 Prerequisite: MUSC 1603.
 A continuation of MUSC 1603. MUSC 1611 should be taken concurrently.
2121. **Piano Class** (TCCNS = MUSI 2181) 1(0-2)
 Prerequisite: MUSC 1121.
 Continuation of MUSC 1121.

2603. **Theory III** (TCCNS = MUSI 2311) 3(3-1)

Prerequisite: MUSC 1613.

Sight-singing more difficult melodies. Dictation of more advanced melodies. Introduction of two-part and four-part dictation. Part-writing of figured basses and melodies using altered chords, modulations, 9th, 11th, and 13th chords. Students will also have the opportunity to freely compose several short works in various styles using some of the more advanced chords as they are studied. Composing in various styles involving advanced chords will be included.

2613. **Theory IV** (TCCNS = MUSI 2312) 3(3-1)

Prerequisite: MUSC 2603.

A continuation of MUSC 2603.

3141. **Woodwind Instruments Class** 1(1-1)

Instruments comprising the woodwind section of the orchestra and band, including practical experience in playing these instruments. The principles concerning history, correct embouchures, tonguing, and phrasing are presented in class. Reed-making and reed-repairing methods are included.

3161. **Brass Instruments Class** 1(1-1)

Instruments which make up the brass section of the orchestra and band, including practical experience in playing these instruments. The principles concerning history, correct embouchures, tonguing, and phrasing are included. Mastery of the fundamentals of playing these instruments is included to prepare for the direction of school orchestras and bands.

3181. **String Instruments Class** 1(1-1)

A course designed to familiarize students with the instruments of the string orchestra; namely, violin, viola, violincello, and bass viol. A study of bowing techniques, positions, and fundamentals that are necessary for the correct teaching of these instruments in the public schools.

3211. **Diction III** 1 semester hour

Prerequisite: MUSC 1211.

Advanced study of Italian and Latin pronunciation. A working knowledge of IPA is expected.

3221. **Diction IV** 1 semester hour

Prerequisite: MUSC 1221.

Advanced study of German and French pronunciation. A working knowledge of IPA is expected.

3281. **Voice Class** 1(1-1)

Instruction and practice in the fundamentals of singing. Vocal anatomy, breath control, practice habits, vowel and consonant production, and performing a song – all a student needs to know about singing correctly.

3291. **Percussion Instruments Class** 1(1-1)

A study of the instruments comprising the percussion section of the orchestra or band. Mastery of the fundamentals in playing these instruments is included to prepare students for the direction of school orchestras or bands.

- 3632. Analysis of Musical Form** 2 semester hours
 Analysis of musical structure including simple binary and ternary forms, the rondo and sonata-allegro forms, and contrapuntal applications.
- 3643. Composition Class** 3 semester hours
 Prerequisite: MUSC 2603.
 An introductory class in composition, with assignments including the creation of musical pieces in various forms and genres drawn from those generally found in Western classical music.
- 3662. Orchestration** 2 semester hours
 Prerequisites: MUSC 1611 and 1613.
 Techniques of scoring and part extraction for orchestra. Special consideration to aspects of school and church ensembles. Problems involving combinations of instrumental groups with other media. As part of the final projects, students will orchestrate an original composition 16-24 measures in length. The original will be in a keyboard style of the student's choosing with the approval of the instructor.
- 3733. Western and World Music I** 3(2-2)
 Prerequisites: MUSC 1611 and 1613.
 A study of the development of classical music in the western European tradition from early Greek music into the 17th century. Music of selected indigenous cultures will be included. Recorded musical scores will illustrate stylistic development of representative composers in each period and give comparisons between western classical music and that of an aural tradition.
- 3743. Western and World Music II** 3(2-2)
 Prerequisites: MUSC 1611 and 1613.
 A study of the development of classical music in the western European tradition from the 17th century into the late 19th century. Music of selected indigenous cultures will be included. Recorded musical scores will illustrate stylistic development of representative composers in each period and give comparisons between western classical music and that of an aural tradition.
- 3753. Western and World Music III (formerly 3723)** 3(2-2)
 Prerequisites: MUSC 1611 and 1613.
 A study of the development of classical music in the western European tradition from the late 19th century into the 21st century. Music of selected indigenous cultures will be included. Recorded musical scores will illustrate stylistic development of representative composers in each period and give comparisons between western classical music and that of an aural tradition.
- 3801. Instrument Repair** 1 semester hour
 Designed to familiarize students with the fundamentals of instrument repair. Includes care and maintenance, inspections, standard minor repairs, and emergency repairs.
- 3813. Foundations of Music I (formerly 4813)** 3(3-0)
 Prerequisite: Junior standing or consent of instructor.
 An overview of elementary music and its relationship to the general music classroom. Students learn music concepts and the importance of music in a child's development.

- 3823. Pedagogy of Music** 3 semester hours
 Designed as an introduction to the teaching of private music lessons, this course will include a survey of business plans, various curricula (including technology), lesson and practice strategies, advertising and maintaining a place of business, and studio policies. Some in-class teaching. Two lessons of practice teaching per week required.
- 3833. Piano Pedagogy** 3 semester hours
 Prerequisite: MUSC 3823.
 Principles and materials for the instruction of piano students of all ages. Knowledge of the leading printed teaching methods and anthologies, and application of leveling principles through pedagogical composition assignments. Some in-class teaching. Two lessons of practice teaching per week required.
- 3843. Keyboard Literature** (formerly 3842) 3 semester hours
 A survey of keyboard literature through periods, composers, and genres, coming as close to the present day as possible. Recorded and student performances of literature used to illustrate various aspects of form and style.
- 3862. Choral Literature** 2 semester hours
 A study of six major choral genres, performance practice and materials from the Renaissance through the 21st Century including a unit on world choral music.
- 3893. Music Technology** (formerly 4893) 3 semester hours
 A survey including advances in music technology, digital synthesis, sequencing, MIDI, desk-top music publishing, basic music acoustics, music applications of the Internet, recording, microphones, and sound systems. May be repeated for credit.
- 4612. Practicum in Vocal Accompanying** 2 semester hours
 Prerequisite: Consent of instructor.
 Survey of the song literature from the Italian, German, and French schools. Introduction to foreign language diction and coaching techniques. Development of score reduction skills.
- 4622. Practicum in Marching Band** 2 semester hours
 A study of the fundamentals of marching band, including history, drill design, music preparation and arranging, show preparation, and importance of auxiliary groups related to the marching band.
- 4632. Practicum in Instrumental Accompanying** 2 semester hours
 Prerequisite: Consent of instructor.
 Survey of Instrumental Duo repertoire, including sonatas. Work in figured bass realization, orchestral reductions, and rehearsal techniques.
- 4823. Foundations of Music II** 3(3-0)
 A course designed for music majors working toward the all-level certification in music. Emphasis is placed upon the specific activities comprising an elementary music program, the materials and skills necessary for implementing such a program, and the integration of music with the total elementary school program. Students receive instruction on lesson plan development and implementation as well as observational and teaching field experience in the elementary school setting.
- 4833. Vocal Pedagogy** 3(3-0)
 Prerequisite: Consent of instructor.

A study of the principles and techniques of teaching voice. The history of teaching methods, vocal organ anatomy, and the science of acoustics will be covered. In-class observation and teaching required.

4843. Basic Conducting 3(3-0)

For music majors and minors. Others may register with the consent of the instructor. Emphasis on basic conducting techniques, style, and interpretation.

4853. Instrumental Conducting 3 semester hours

Prerequisite: MUSC 4843.

Continuation, development, and expansion of MUSC 4843 with emphasis on instrumental conducting.

4863. Choral Conducting (formerly 4862) 3 semester hours

Prerequisite: MUSC 4843.

Continuation, development, and expansion of MUSC 4843 with emphasis on choral conducting and choral methods.

4873. Foundations of Music III 3(3-0)

Prerequisites: MUSC 1611, 1613, ENGL 1113, and 1123.

A course designed for music education majors to learn curriculum development for the elementary music program. Students learn materials and pedagogy, teaching methodologies, lesson planning, and assessment. Observation and field experience are part of this course.

4943. Senior Project 3 semester hours

A capstone written and oral project for the B.A. in Music student synthesizing learning from the music major and required minor. To be given in public presentation; may be in conjunction with senior recital as lecture-recital.

4953. Special Topics in Music 3(3-0)

Topics will vary. May be repeated for credit with different content.

4963. Independent Study in Music 3 semester hours

Prerequisite: Consent of instructor and program chair.

Individual student scholarship with faculty guidance. May be repeated for credit.

DOLORES P. BOLIN DISTINGUISHED CHAIR OF PIANO

The Dolores P. Bolin Distinguished Chair of Piano was established in 1981 through the generous gift of Mrs. Bolin in memory of her husband, Wichita Falls oil man, D. Houston Bolin. In 2000, a second chair was established through a generous gift from D. Phil and Aurora S. Bolin. These endowments allow Midwestern State University to enhance its high level of pianistic and musical excellence. Past Bolin Chairs were Dr. Peter Armstrong, Julie Bees, and Nancy Boston.

Dr. Ruth Morrow is the current Dolores P. Bolin Distinguished Chair of Piano. She holds degrees from Indiana University (D.M., Piano Performance and Pedagogy), Eastman School of Music (M.M., Piano; M.A., Musicology), and Whitman College (B.A., Music, Philosophy). With a background which spans all musical styles and includes performances throughout the United States and in Europe, Dr. Morrow brings depth, breadth, and enthusiasm to her position.

THEATRE

Laura Jefferson, Chair (Fain Fine Arts Center 106)

Professors: Fischli, Henschel, Lewandowski

Associate Professor: Jefferson

Assistant Professor: Smith

MISSION STATEMENT FOR THE THEATRE PROGRAM

The mission of the Midwestern State University theatre program is to advance the study, creation, and performance of live theatre, and, in so doing, to equip students to make positive cultural contributions as theatre educators, professionals, or graduate students. The production component of the program, the MSU Theatre, plays a vital role in the pursuit of this mission by emphasizing creative process and challenging students and faculty to hold to its stated high standards: "In the classroom, on the stage, or behind the scenes, we will do our best to bring credit to our art form and to enlighten ourselves and those we entertain. To succeed, we must reject the gratification of ego and embrace unselfish cooperation, for ours is a collaborative art form. We must also take risks by allowing theatre to open our minds or disturb our audiences when such risks can promote a more tolerant, inclusive society."

A. Bachelor of Fine Arts with a major in Theatre (Emphasis in Design/Technology)

The purpose of the B.F.A. degree with an emphasis in design/technology is to prepare the student for entry into a graduate program in design and/or technical theatre or for employment with amateur, semi-professional, or professional theatrical-production organizations.

Academic Foundations and Core Curriculum	33-35
ENGL 1113, 1123	6
Speech - met by course required in major	0
HIST 1133, 1233	6
POLS 1333, 1433	6
Natural Sciences - two laboratory courses	6-8
MATH 1053 or 1233	3
(Students seeking teacher certification should take MATH 1233.)	
Fine Arts - met by course required in major	0
Humanities - met by courses required in major	0
SOCL 1133 or PSYC 1103	3
ECON 1333, 2333, or 2433	3
Computer Competency Requirement	0-3
EDUC 1023, CMPS 1013, 1033, or pass department exam	0-3
(Students seeking teacher certification should take EDUC 1023.)	
Physical Activity Requirement	2
Exercise Physiology (2 different activity courses or 1 semester of marching band and 1 activity, or 2 semesters of marching band)	2

Writing Proficiency Requirement

Graduation requirements at Midwestern State University include passing the Writing Proficiency Exam, to be taken after the student has completed 60 hours of coursework. Not passing the exam requires taking and passing ENGL 2113 – Composition Skills.

NOTE: *A grade of D will not be accepted to meet requirements for the Theatre Core or the Design/Technology Emphasis.*

Theatre Core Requirements 40

SPCH 1233	Voice and Diction	3
THEA 1121	Rehearsal and Production I (2 semesters of enrollment)	2
THEA 1403	Introduction to Acting	3
THEA 1513	Stagecraft	3
THEA 1613	Performance Makeup	3
THEA 2121	Rehearsal and Production II (2 semesters of enrollment)	2
THEA 2433	Theatre History I	3
THEA 2443	Theatre History II	3
THEA 3003	Contemporary Theatre	3
THEA 3013	Costume Construction	3
THEA 3121	Advanced Rehearsal and Production I (2 semesters of enrollment)	2
THEA 3423	Script Analysis	3
THEA 3433	Principles of Directing	3
THEA 4121	Advanced Rehearsal and Production II (1 semester of enrollment)	1
THEA 4483	Collaborative Play Production	3

Design/Technology Emphasis 36**Required Courses:**

ART 1113	Two-Dimensional Design	3
ART 1123	Three-Dimensional Design	3
ART 1313	Drawing I	3
THEA 3143	Stage Management	3
THEA 3353	Theatre Graphics	3
THEA 3473	Performance Lighting	3
THEA 3493	Performance Sound	3
THEA 4363	Scene Design	3
THEA 4373	Costume Design	3
THEA 4523	Advanced Project in Design/Technology	3

Selective Courses - 6 hours from: 6

ART 1313	Drawing II
THEA 4393	British Theatre: Performance
THEA 4493	British Theatre: Production
THEA 4523	Advanced Project in Design/Technology (a second enrollment with a different project)
ENGL 3253	Dramatic Literature
ENGL 4773	Shakespeare

Advisor-Approved Electives 4-9**Total Semester Hours, including at least 39 upper-level hours 120**

B. Bachelor of Fine Arts with a major in Theatre (Emphasis in Performance)

The purpose of the B.F.A. degree with an emphasis in performance is to prepare the student for entry into a graduate program in theatre performance or for employment with amateur, semi-professional, or professional theatrical-production organizations.

Academic Foundations and Core Curriculum 33-35

ENGL 1113, 1123	6
Speech - met by course required in major	0
HIST 1133, 1233	6
POLS 1333, 1433	6
Natural Sciences - two laboratory courses	6-8
MATH 1053 or 1233	3
(Students seeking teacher certification should take MATH 1233.)	
Fine Arts - met by course required in major	0
Humanities - met by courses required in major	0
SOCL 1133 or PSYC 1103	3
ECON 1333, 2333, or 2433	3

Computer Competency Requirement 0-3

EDUC 1023, CMPS 1013, 1033, or pass department exam	0-3
(Students seeking teacher certification should take EDUC 1023.)	

Physical Activity Requirement 2

Exercise Physiology (2 different activity courses or 1 semester of marching band and 1 activity, or 2 semesters of marching band)	2
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Writing Proficiency Requirement

Graduation requirements at Midwestern State University include passing the Writing Proficiency Exam, to be taken after the student has completed 60 hours of coursework. Not passing the exam requires taking and passing ENGL 2113 – Composition Skills.

NOTE: A grade of D will not be accepted to meet requirements for the Theatre Core or the Performance Emphasis.

Theatre Core Requirements 40

SPCH 1233 Voice and Diction	3
THEA 1121 Rehearsal and Production I (2 semesters of enrollment)	2
THEA 1403 Introduction to Acting	3
THEA 1513 Stagecraft	3
THEA 1613 Performance Makeup	3
THEA 2121 Rehearsal and Production II (2 semesters of enrollment)	2
THEA 2433 Theatre History I	3
THEA 2443 Theatre History II	3
THEA 3003 Contemporary Theatre	3
THEA 3013 Costume Construction	3
THEA 3121 Advanced Rehearsal and Production I (2 semesters of enrollment)	2
THEA 3423 Script Analysis	3

THEA 3433	Principles of Directing	3
THEA 4121	Advanced Rehearsal and Production II (1 semester of enrollment)	1
THEA 4483	Collaborative Play Production	3

Performance Emphasis 35

Required Courses:

THEA 2113	Stage Movement	3
THEA 2122	Dance for the Theatre	2
THEA 3123	Advanced Movement	3
THEA 3143	Stage Management	3
THEA 3393	Advanced Acting	3
THEA 4213	Voice for the Theatre and Stage Dialects	3
THEA 4223	Period Style and Movement	3
THEA 4513	Advanced Project in Performance	3

Selective Courses - 12 hours from: 12

THEA 3353	Theatre Graphics
THEA 3473	Performance Lighting
THEA 3493	Performance Sound
THEA 4363	Scene Design
THEA 4373	Costume Design
THEA 4393	British Theatre: Performance
THEA 4493	British Theatre: Production
THEA 4513	Advanced Project in Performance (a second enrollment with a different project)
ENGL 3253	Dramatic Literature
ENGL 4773	Shakespeare
AMUS 1701	Voice for Non-Music Majors/Minors (3 semesters)

Advisor-Approved Electives 5-10

Total Semester Hours, including at least 39 upper-level hours 120

C. Bachelor of Fine Arts with a major in Theatre with Teacher Certification
requirements are found on page 160.

The purpose of the B.F.A. degree with teacher certification is to prepare the student to teach and produce theatre in primary, middle, or secondary school settings.

To be accepted into the teacher education program, a student must (1) complete at least 60 semester hours of credit, (2) file a formal application and three letters of recommendation in the Education Office, (3) earn satisfactory scores on the Texas Higher Education Assessment – or equivalent – in reading, writing, and mathematics, and (4) compile at least a 2.5 grade average in freshman English (excluding developmental courses) and a 2.75 cumulative grade average.

REQUIREMENTS FOR THE MINOR IN THEATRE (18 semester hours):

THEA 1403	Introduction to Acting	3
THEA 1513	Stagecraft	3
THEA 1613	Performance Makeup	3
THEA 3013	Costume Construction	3
THEA 3423	Script Analysis	3

3 hours from:	3
THEA 2433 Theatre History I	
THEA 2443 Theatre History II	
THEA 3003 Contemporary Theatre	

COURSES IN THEATRE (THEA)

1121. **Rehearsal and Production I** (TCCNS = DRAM 1120) 1 semester hour
Basic laboratory experience associated with the semester's productions. Assigned tasks in performance and/or production. May be repeated once for credit.
1403. **Introduction to Acting** (formerly 2533) (TCCNS = DRAM 1351) 3(2-2)
Open to non-majors. Study and application of the theories and techniques of the art of acting with emphasis on acting as a communicative process.
1503. **Appreciation of Theatre** (TCCNS = DRAM 1310) 3(3-0)
Analysis of the theatre experience, especially from the viewpoint of the spectators. Aesthetic principles involved in all phases of the theatrical art. The development of this art by mankind.
1513. **Stagecraft** (TCCNS = DRAM 1330) 3(2-2)
Basic construction, finishing, painting, and lighting of scenery and properties for stage, studio, and display.
1613. **Performance Makeup** (TCCNS = DRAM 1341) 3(3-0)
Principles and application of corrective and character makeup.
2113. **Stage Movement** (formerly 1413) (TCCNS = DRAM 1322) 3(3-0)
The use of improvisational techniques to explore the coordination of physical and vocal expression. For theatre majors and minors only.
2121. **Rehearsal and Production II** (TCCNS = DRAM 1121) 1 semester hour
An extension of THEA 1121 with different productions and new assigned tasks. May be repeated once for credit.
2122. **Dance for the Theatre** 2(1-2)
Prerequisite: Consent of Chair.
Basic instruction in tap, jazz, and modern. Instruction may be related to productions being prepared for public presentation.
2433. **Theatre History I** (formerly 3403, 4433) (TCCNS = DRAM 2361) 3(3-0)
History and theory of playwriting, directing, acting, and production from the beginnings through the eighteenth century.
2443. **Theatre History II** (formerly 3413, 4443) (TCCNS = DRAM 2362) 3(3-0)
History and theory of playwriting, directing, acting, and production from the post-Renaissance era through the mid-twentieth century. Includes a unit on non-Western theatre.
3003. **Contemporary Theatre** 3(3-0)
Prerequisites: THEA 2433 and 2443, or consent of instructor.
A study of selected acclaimed plays from the contemporary theatre, including, but not limited to, musical theatre, African-American and other minority drama, and other significant

dramatic works. Also includes discussion of leading theatrical figures and movements that have defined the contemporary theatre and inspired avant garde theatrical production. May be repeated for credit.

3013. Costume Construction (formerly 4463) 3(2-2)

Techniques in the construction of stage costumes, costume crafts for period costumes, and modern clothes for the stage.

3121. Advanced Rehearsal and Production I 1 semester hour

Prerequisite: THEA 2121.

Advanced laboratory experience associated with the semester's productions. May be repeated once for credit.

3123. Advanced Movement 3(3-0)

Prerequisite: THEA 2113.

Exploration of advanced techniques in stage movement.

3143. Stage Management 3(3-0)

Prerequisite: Junior standing or consent of instructor.

Protocol, procedures, techniques, and tips for effective stage management during the preliminary, rehearsal, and performance phases of a production. Includes methods for ensuring effective communication, coordination, note taking, record keeping, and people management, as well as ways to maximize efficiency, productivity, and accuracy in rehearsals and performances.

3353. Theatre Graphics (formerly 3483) 3(2-2)

Prerequisite: THEA 1513 or consent of instructor.

Principles and practice in hand and computer-aided drafting for the performing arts. Application of standard graphic language in scenic design and technical production.

3393. Advanced Acting (formerly 3543) 3(2-2)

Prerequisites: SPCH 1233 and THEA 1403.

Advanced study and application of the theories and techniques of acting with emphasis on characterization, role analysis, and ensemble playing. Introduction to acting for the camera, voice-over, resume, and audition preparation.

3423. Script Analysis 3(3-0)

Analysis of the dynamics, messages, themes, images, language, and historical/biographical background of plays drawn from different periods, genres, and styles.

3433. Principles of Directing 3(2-2)

Prerequisites: SPCH 1233, THEA 1403 and 3423, or consent of the instructor.

Exploration of the fundamental techniques and aesthetics of directing. Practice in translating analysis into performance and production through the direction of short scenes. Consideration of the role of the director in play selection, production conception, design, casting, rehearsing, and staging.

3473. Performance Lighting 3(2-2)

Study and practice in lighting theories. Principles of electricity as applied to theatre, broadcast, and concert lighting.

210

3493. **Performance Sound** 3(3-0)
Principles of, and practices in, sound design, reinforcement, recording, editing, and reproduction in the entertainment industry.
3513. **Special Topics in Theatre** 3(3-0)
Topics vary. May be repeated with different content.
4121. **Advanced Rehearsal and Production II** 1 semester hour
Prerequisites: THEA 1121, 2121, and 3121.
An extension of THEA 3121 with different productions and new assigned tasks. May be repeated once for credit.
4213. **Voice for the Theatre and Stage Dialects** 3(3-0)
Prerequisite: SPCH 1233 or consent of the instructor.
The course begins with exercises in phonetics, vocal expressiveness, and vocal clarity. Students proceed to a study of 4-5 major stage dialects aimed at integrating the learning of dialects with the use of effective vocal technique.
4223. **Period Style and Movement** 3(2-2)
Prerequisites: SPCH 1233, THEA 1403, and 2113, or consent of instructor.
Exposure to acting in classical roles, especially those of Shakespeare. Exploration of vocal and physical styles appropriate for these periods. Vocal/physical integration. Practice with period costumes and props.
4363. **Scene Design** (formerly 3463) 3(2-2)
Prerequisites: THEA 1513 and 3353, or consent of instructor.
Study and practice in scenic design principles, including the creation of a portfolio.
4373. **Costume Design** (formerly 4473) 3(2-2)
Prerequisite: THEA 3013, or consent of instructor.
Design of costumes for stage, including the creation of a digital portfolio.
4393. **British Theatre: Performance** 3(3-0)
As part of the British Studies Program, this course involves experiencing professional British theatre productions, then critiquing them from the standpoint of performance. Instruction will be bolstered by professional actors and directors invited to class to discuss their work or conduct workshops. The course will also include trips to British theatre museums and collections.
4483. **Collaborative Play Production** (formerly 3443) 3(2-2)
Prerequisites: THEA 1513, 1613, 3013, and 3433, or consent of the instructor.
Collaboration as a student director, designer, and/or technician in the production of a one-act play for presentation before an audience. Includes responsibility for designated performance, design, technical, and/or promotional aspects of the production. Design/tech students will also embellish their portfolios.
4493. **British Theatre: Production** 3(3-0)
As part of the British Studies Program, this course involves experiencing professional British theatre productions, then critiquing them from the standpoint of design. Instruction will be bolstered by professional designers, stage managers, and technicians invited to class to discuss their work or conduct workshops. The course will also include trips to British theatre museums and collections.

4503. **Independent Study in Theatre** 3 semester hours
Prerequisite: Consent of instructor.
Individual student scholarship with faculty guidance. May be repeated for credit.
4513. **Advanced Project in Performance** 3 semester hours
Prerequisite: Consent of the Chair of Theatre.
Specialized research and/or projects involving theatrical performance. May be repeated once for selective credit.
4523. **Advanced Project in Design/Technology** 3 semester hours
Prerequisite: Consent of the Chair of Theatre.
Specialized research and/or projects related to theatre technology and/or design. May be repeated once for selective credit.



COLLEGE OF HEALTH SCIENCES AND HUMAN SERVICES

James Johnston, Interim Dean (J. S. Bridwell Hall 104D)

MISSION STATEMENT FOR THE COLLEGE OF HEALTH SCIENCES AND HUMAN SERVICES

The College of Health Sciences and Human Services includes undergraduate study in athletic training, exercise physiology, criminal justice, dental hygiene, nursing, radiologic sciences, respiratory care, and social work; with graduate programs in exercise physiology, radiologic sciences, health service administration, nursing, and public administration. There are also degree programs designed specifically for working radiographers, registered nurses, and respiratory therapists. Post-master's nursing students may take courses pursuant to certification as nurse educators or family nurse practitioners. All programs are based upon a comprehensive liberal arts and sciences foundation and include both clinical/practicum and didactic learning opportunities in the courses of the major. Graduates of the dental hygiene, nursing, respiratory care, and associate degree radiologic sciences programs are eligible for licensure or certification in their disciplines.

Admission Policies

Applications are accepted from men and women regardless of age or marital status. Applicants will be considered for admission on an individual basis.

1. See the sections on Admission and Registration Information for details. Admission to Midwestern State University does not guarantee acceptance into a health science program.
2. It is recommended that the high school background include courses in chemistry, biology, and algebra (2 units) for health sciences programs.
3. Application forms for admission to nursing, dental hygiene, radiologic sciences, and respiratory care programs may be obtained from the respective departments.
4. See individual program for specific admission requirements. In exceptional cases, persons who do not meet the criteria for regular admission may be granted provisional admission by the College Admissions Committee.
5. The semester-by-semester program of individual courses should be followed by entering students. Exceptions may be made by the department chair.



ATHLETIC TRAINING and EXERCISE PHYSIOLOGY

Benito Velasquez, Chair (D.L. Ligon Hall 215)

Professor: Wyatt

Associate Professor: Velasquez

Assistant Professor: Winchester

Instructors: Austin, Carroll, Diehm, Elder, Flores-Stafford, Haggerty,
Johnson, Linn, Lyons, Maskill, McGraw, Meachum, Primavera, Rawson,
Ray, Reay, Renner, Rodriguez, Segler, Styles, Taylor, Tigert, Trimble, Wilkins

Professors Emeriti: Dudley, Gillespie, Henderson, Stockton

The Department of Athletic Training and Exercise Physiology offers degree programs which prepare students for a variety of jobs in sport-related and allied health fields. An Athletic Training major is offered for the individual desiring a career in sports medicine. An Exercise Physiology major is offered for the individual desiring a career in this allied health field. Students who complete the Exercise Physiology major will also satisfy prerequisite course requirements for entry into Physical Therapy degree programs.

ATHLETIC TRAINING MAJOR

The Athletic Training Education Program is accredited by the Commission on Accreditation of Athletic Training Education Programs (CAATE).

The requirements for the Bachelor of Science in Athletic Training (BSAT) degree with a major in Athletic Training are as follows:

General (see page 89)

Academic Foundations and Core Curriculum (See page 91)

Major (62 semester hours)

ATRN 1073, 1203, 1211, 1213, 2001, 2433, 2901, 2903, 3001, 3101, 3103, 3331, 3801,
3803, 3811, 3813, 3901, 3913, 4001, 4423, 4801, 4903, and 4911

EXPH 1993, 2333, 4701, and 4703

KNES 4033

PSYC 3314

Minor - no minor required.

Upon completion of this degree the student will be eligible to apply for the certification exam given by the national Board of Certification (BOC) and the Texas Athletic Training Licensure Exam administered by the Texas Department of State Health Services.

ADMISSION REQUIREMENTS

Students interested in Athletic Training should seek advisement from the ATEP faculty. The athletic training pre-professional program is open to any beginning freshman or transfer student who has been admitted to MSU. The pre-professional curriculum consists of a minimum of 24 hours including the following courses: ATRN 1073 and BIOL 1134, plus an additional 17 hours of coursework. It is highly suggested that ATRN 1203 and BIOL 1234 are taken during the pre-professional year. A minimum of 100 hours of clinical observation is

required of every pro-professional student. Selection for admission into the professional phase of the ATEP is made in April. Selection into the ATEP is competitive and completion of the minimum requirements does not guarantee admission into the professional program. To be considered for admission into the ATEP, the applicant must:

1. Maintain a cumulative 2.5 GPA.
2. Have completed a minimum of 24 hours of college course work including a “C” or better in ATRN 1073 and BIOL 1134.
3. Have documented a minimum of 100 hours of observation under a Certified/Licensed Athletic Trainer.
4. Submit to the Vinson Health Center a technical standard worksheet and completed shot records.
5. Submit the following to the Athletic Training Selection Committee: ATEP application, 3 letters of recommendation, documentation of technical standards, and proof of current CPR for professional health care provider and First Aid certification.
6. Complete an admissions interview with a committee composed of the Program Director, Clinical Education Coordinator, Head Athletic Trainer, Assistant Athletic Trainer, outside representative (faculty, ACI, or CI), and an Athletic Training Student Representative currently in good standing with the program.

Due to the competitiveness of the program, not all applicants meeting the criteria will be selected for admission into the ATEP. Selection into the ATEP will be based on the following criteria:

- | | |
|--|--------|
| 1. Prerequisite Grades (ATRN 1073 & BIOL 1134) | Yes/No |
| 2. Hours of Observation | Yes/No |
| 3. Completed File | Yes/No |

(Any ‘No’ categories will not be considered for an interview and not able to continue in the admissions process.)

- | | |
|----------------------------------|------------|
| 4. Cumulative GPA* | 33 percent |
| 5. Interview | 33 percent |
| 6. Average of ACI/CI Evaluations | 33 percent |

*If a student has attempted a course multiple times at other institutions, the Athletic Training Education Program will consider only the highest grade. The lower grades will not be considered in the Cumulative GPA.

RETENTION

Once admitted into the ATEP, the student must maintain a cumulative GPA of at least 2.5 and must receive no grade lower than a “C” in all major and associated courses. A student who does not maintain a 2.5 GPA will be placed on probation with the ATEP for a semester. If after one semester the student has not achieved a cumulative GPA of at least 2.5, he/she may be dismissed from the program or allowed to continue for a maximum of one additional probationary semester. The latter condition will be granted only with permission from the ATEP Program Director, Clinical Education Coordinator, and the Chair of the Department of Athletic Training and Exercise Physiology. A student who receives a grade lower than a “C” in ATRN courses, will be on probation until able to repeat that course. A student will not be allowed to progress onto the next semester or level of ATRN courses until the course has been repeated and the grade has been replaced with a “C” or better. If a student fails to achieve a “C” or better during the second attempt, the student will be dismissed from the ATEP.

TECHNICAL STANDARDS FOR ADMISSION

The Athletic Training Education Program at Midwestern State University is a rigorous and intense program that places specific requirements and demands on the students enrolled in the program. An objective of this program is to prepare graduates to enter a variety of employment settings and to render care to a wide spectrum of individuals engaged in physical activity. The technical standards set forth by the Athletic Training Education Program establish the essential qualities considered necessary for students admitted to this program to achieve the knowledge, skills, and competencies of an entry-level athletic trainer, as well as meet the expectations of the program's accrediting agency (Commission on Accreditation of Athletic Training Education [CAATE]). The following abilities and expectations must be met by all students admitted to the Athletic Training Education Program. In the event a student is unable to fulfill these technical standards, with or without reasonable accommodation, the student will not be admitted into the program.

Compliance with the program's technical standards does not guarantee a student's eligibility for the BOC exam.

Candidates for selection to the Athletic Training Education Program must demonstrate:

1. the mental capacity to assimilate, analyze, synthesize, integrate concepts and problem solve to formulate assessment and therapeutic judgments and to be able to distinguish deviations from the norm;
2. sufficient postural and neuromuscular control, sensory function, and coordination to perform appropriate physical examinations using accepted techniques; and accurately, safely, and efficiently use equipment and materials during the assessment and treatment of patients;
3. the ability to communicate effectively and sensitively with patients and colleagues, including individuals from different cultural and social backgrounds; this includes, but is not limited to, the ability to establish rapport with patients and communicate judgments and treatment information effectively. Students must be able to understand and speak the English language at a level consistent with competent professional practice;
4. the ability to record the physical examination results and a treatment plan clearly and accurately;
5. the capacity to maintain composure and continue to function well during periods of high stress;
6. the perseverance, diligence and commitment to complete the athletic training education program as outlined and sequenced;
7. flexibility and the ability to adjust to changing situations and uncertainty in clinical situations; and
8. affective skills and appropriate demeanor and rapport that relate to professional education and quality patient care.

Candidates for selection to the Athletic Training Education Program will be required to verify they understand and meet these technical standards or that they believe that, with certain accommodations, they can meet the standards.

The Disability Support Services Office will evaluate a student who states he/she could meet the program's technical standards with accommodation and confirm that the stated condition qualifies as a disability under applicable laws.

If a student states he/she can meet the technical standards with accommodation, then the University will determine whether it agrees that the student can meet the technical standards

with reasonable accommodation; this includes a review as to whether the accommodations requested are reasonable, taking into account whether accommodation would jeopardize clinician/patient safety, or the educational process of the student or the institution, including all course work, clinical experiences and internships deemed essential to graduation.

ATHLETIC TRAINING EDUCATION PROGRAM

Clinical and Field Experience: Due to the strong practical component of the ATEP, clinical supervision by approved clinical instructors provides for unique educational experiences. The CAATE standards require that students receive a minimum of two academic years of clinical experience as part of the course work in the ATEP. This clinical instruction and supervision will occur in a variety of athletic training settings including collegiate, secondary, clinical, hospital, and rehabilitative. These experiences are provided in conjunction with ATRN 1211, 2001, 2901, 3001, 3801, 3811, 3901, 4001, 4801, and 4911.

Financial Information: Fees associated with the program include, but are not limited to, coverage of annual liability insurance premiums, uniforms, and personal equipment necessary for clinical experience, immunizations and screenings, transportation, and meals associated with off-campus clinical experience, and professional memberships.

Graduation: The completion of a Bachelor of Science in Athletic Training degree with a major in Athletic Training requires 120 semester credit hours. This degree is exempt from the University's minor requirement. Students may pursue additional major or minor areas of study to complement the program, realizing that additional course work and time will be necessary. A teaching certificate is recommended for those students wishing to seek employment in secondary school settings upon graduation.

Careers in Athletic Training: Following graduation, attainment of BOC certification and proper state licensure, the athletic trainer may practice in a variety of settings including secondary schools, colleges and universities, professional athletics, sport medicine clinics, fitness/wellness centers, and corporate/industrial settings.

COURSES IN ATHLETIC TRAINING (ATRN)

The following courses do not require acceptance into the Athletic Training Education Program.

1073. Care and Prevention of Athletic Injuries (TCCNS = PHED 2356) 3(3-0)

An introduction to basic athletic training techniques used for prevention and care of injuries common to the physically active individual. Students will receive first-aid and CPR certification in addition to basic athletic taping, bracing, and padding techniques.

1203. Health and Wellness 3(3-0)

This course provides students with a broad in-depth study of the dynamic process involved in achieving and maintaining a healthy and productive lifestyle. Learning experiences emphasizing general knowledge and practical application of concepts relative to physical, emotional, intellectual, spiritual, social and environmental health will provide the foundation for the dynamic process presented in this course. (Same as EXPH 1203.)

2433. Medical Terminology 3(3-0)

An introduction into terminology commonly used in health care professions. This course will focus on prefixes, suffixes, and whole-word terminology for medical records, charting, and communication with other allied health care professionals.

The following courses require acceptance into the Athletic Training Education Program.

1211. **Athletic Training Clinical I** 1(0-3)
 Prerequisite: Athletic Training major or approval by instructor. Co-requisite: ATRN 1213.
 Includes assigned clinical experiences as well as the laboratory and clinical application of anatomical landmarks in relation to muscle origins, insertions, and actions, with a focus on palpation skills. This clinical includes an in-depth study and application of taping, wrapping, padding, and bracing techniques in the athletic training clinical setting.
1213. **Taping and Palpations** 3(3-0)
 Prerequisite: Athletic Training major or approval by instructor. Co-requisite: ATRN 1211.
 An investigation of muscle origin, insertion and actions with a demonstration of bony and soft tissue palpations with reference to proper medical terminology and abbreviations. Students are instructed in the proper application of taping, wrapping, padding, and bracing techniques in athletic training.
2001. **Athletic Training Colloquium I** 1(1-0)
 Prerequisite: Admittance into the Athletic Training Education Program.
 Assigned athletic training seminar topics that explore problem-based situations and encourage critical thinking and a continued mastery of athletic training content to reinforce retention of information from previous semester.
2901. **Athletic Training Clinical II** 1(0-3)
 Prerequisites: ATRN 1073, 1211. Co-requisite: ATRN 2903.
 Includes assigned clinical experiences as well as practical experiences in both laboratory and clinical application of therapeutic modalities. Topics include selection, implementation, and effectiveness of therapeutic modalities in the athletic training clinical setting.
2903. **Therapeutic Modalities** (formerly 4803) 3(3-0)
 Prerequisite: ATRN 1073. Co-requisite: ATRN 2901.
 Investigation of the scientific principles underlying therapeutic modalities in athletic training. Includes discussion of selective modalities therapeutic purposes, indications, contraindications, and adverse effects.
3001. **Athletic Training Colloquium II** 1(1-0)
 Prerequisites: ATRN 2901, 3803, and 3813.
 Assigned athletic training seminar topics that explore problem-based situations and encourage critical thinking and a continued mastery of athletic training content to reinforce retention of information from previous semester.
3101. **Athletic Training Clinical IV** (formerly 2701) 1(0-3)
 Prerequisites: ATRN 2901, 3901. Co-requisite: ATRN 3103.
 Includes assigned clinical experiences as well as practical experience in prevention, assessment, and management of injuries and illnesses common to the physically active individual.
3103. **General Medical Assessment** (formerly 2703) 3(3-0)
 Prerequisite: ATRN 3913. Co-requisite: ATRN 3101.
 Principles for prevention, assessment, and management of injuries and illnesses common to the physically active individual. Learning experiences emphasize concepts related to pre-

participation physical examinations; injuries and illnesses of the abdominal, thoracic, cranial, and facial areas; and the athletic trainer's role as a part of a healthcare team.

3331. Sport and Exercise Pharmacology 1(1-0)

Prerequisite: Senior standing within the ATEP.

A survey of important pharmacological concepts and agents relevant to health, sport, and fitness professionals.

3801. Orthopedic Assessment and Management I Lab 1(0-3)

Prerequisite: ATRN 1073. Co-requisite: ATRN 3803.

Evaluation and management of orthopedic injuries and conditions of the physically active patient, with a specific focus on the lower extremity, lumbar, and sacral spine. Includes practical experience in both laboratory and clinical applications.

3803. Evaluation of Athletic Injuries I (formerly 4003) 3(3-0)

Prerequisite: ATRN 1073. Co-requisite: ATRN 3801.

Integration of understanding the mechanism of injury into assessment techniques used to distinguish injuries common to the physically active individual with a specific focus on the lower extremity, lumbar, and sacral spine.

3811. Orthopedic Assessment and Management II Lab 1(0-3)

Prerequisite: ATRN 3801. Co-requisite: ATRN 3813.

Evaluation and management of orthopedic injuries and conditions of the physically active patient, focus on the upper extremity, cervical, and thoracic spine. Includes practical experience in both laboratory and clinical applications.

3813. Evaluation of Athletic Injuries II 3(3-0)

Prerequisite: ATRN 3803. Co-requisite: ATRN 3811.

Integration of understanding of the mechanism of injury into assessment techniques used to distinguish injuries common to the physically active individual with a focus on the upper extremity, cervical, and thoracic spine.

3901. Athletic Training Clinical III 1(0-3)

Prerequisites: ATRN 2901, 3811. Co-requisite: ATRN 3913.

Includes assigned clinical experiences as well as practical experiences in both laboratory and clinical application of therapeutic and rehabilitation exercises. Topics include the planning and implementation of therapeutic exercise related to the rehabilitation of the physically active patient.

3913. Therapeutic Exercise (formerly 4813) 3(3-0)

Prerequisite: ATRN 3813. Co-requisite: ATRN 3901.

Theory and practice of rehabilitating physically active individuals. (Same as KNES 3913.)

4001. Athletic Training Colloquium III 1(1-0)

Prerequisite: ATRN 3913.

Assigned athletic training seminar topics that explore problem-based situations and encourage critical thinking and a continued mastery of athletic training content to reinforce retention of information from previous semester.

4123. Data Analysis 3(3-0)

The focus of this course is to provide an interdisciplinary data analysis course specifically for athletic training majors using techniques and data structures relevant to clinical investigations. General topics include choosing correct procedures and using statistics to understand clinical data. Specific topics include but are not limited to basic statistics, measures of correlation and difference, hypothesis testing and bias, confidence intervals,

reliability and validity, significance, power analysis, levels of evidence, sample size and distribution, assessing effects of treatment, quality improvement, relative risk and relative risk reduction, and odds ratio.

4423. Research and Athletic Training 3(3-0)

This lecture course instructs the athletic training student in the role that research plays in the practice of athletic training. Topics include problem development, literature review, data analysis techniques and interpretations, institutional review boards, and communicating the results.

4801. Athletic Training Clinical V 1(0-3)

Prerequisites: ATRN 3101, 3901. Co-requisite: ATRN 4903.

Includes assigned clinical experiences as well as practical experiences in both laboratory and clinical application of athletic training techniques with some focus on administrative skills.

4903. Administration of Athletic Training (formerly 3903) 3(3-0)

Prerequisite: Senior standing within the ATEP. Co-requisite: ATRN 4801.

Overview of administrative and finance principles applicable to the operation of athletic training programs.

4911. Capstone: Theories and Practice of Athletic Training 1(0-3)

Prerequisite: Senior standing within the ATEP.

Problem-based course to encourage critical thinking and a continued mastery of athletic training clinical skills. Includes practical experience in both laboratory and clinical applications.

EXERCISE PHYSIOLOGY MAJOR

The requirements for the Bachelor of Science in Exercise Physiology are as follows:

General (see page 89)

Academic Foundations and Core Curriculum - 58 semester hours (See page 91)

Major (29 semester hours)

ATRN 1073, EXPH 1983, 2002, 2333, 2501, 2503, 3331, 3913, 4676 (or 4953 and 4963), 4701, and 4703.

Exercise Physiology students have the following other specific requirements:

BIOL 1144, 3104, 3234, 4444, CMPS 1013, ENGL 3203, PHYS 1144, 1244, 3 hours advanced PSYC elective, and 3 hours advanced BIOL or CHEM elective.

REQUIREMENTS FOR A MINOR IN CYCLING PERFORMANCE (19 semester hours)

EXPH 1993, 2002, 2333, 2501, 2503, 3331, 4973, 4983

Note: Students majoring in Exercise Physiology need substitutions for courses above used in the major. Please see Exercise Physiology advisor for appropriate substitutions.

EXERCISE PHYSIOLOGY - ACTIVITY COURSES (EXPH)

1001 **Archery**

1011 **Fundamentals of Physical Activity and Health** (TCCNS = PHED 1164)

1021 **Bowling**

1031 **Varsity Sports**

1051 **Golf**

1061 **Conditioning Activities**

- 1081 ***Adapted Physical Education** (by permission only)
- 1091 **Dance Activities**
- 1101 **Sailing**
- 1111 **Jogging & Physical Fitness Appraisal**
- 1121 **Angling & Casting**
- 1131 **Tumbling**
- 1141 **Badminton**
- 1151 **Soccer**
- 1161 **Weight Training**
- 1171 **Softball**
- 1181 **Volleyball**
- 1191 **Flag Football**
- 1201 **Basketball**
- 1211 **Pilates**
- 1271 **Backpacking**
- 1291 **Walking and Aerobic Fitness**
- 1311 **Spinning**
- 1321 **Canoeing**
- 1341 **Beach Volleyball**
- 1401 **Racquetball**
- 1411 **Beginning Cycling**
- 1421 **Advanced Cycling**
- 1431 **Recreational Cycling**
- 1821 **Tennis**
- 1831 **Kickboxing Aerobics**
- 1841 **Taekwondo: South Korean Martial Arts** (Each student must purchase a uniform through the Department of Athletic Training and Exercise Physiology.)
- 1851 **Fencing**

COURSES IN EXERCISE PHYSIOLOGY (EXPH)

- 1203. **Health and Wellness** (TCCNS = PHED 1304) 3(3-0)
In-depth study of the dynamic process involved in achieving and maintaining health and fitness across the lifespan. (Same as ATRN 1203.)

- 1983. **Anatomical Assessment of Human Movement** 3(2-2)
Examination of the anatomical basis of human movement with consideration given to biomechanical constraints that influence normal, athletic, and pathological movement. Primary systems of study are skeletal, muscular, cardiovascular, and respiratory systems.

- 1993. **Biomechanics and Analysis of Human Movement** 3(3-0)
Mechanical, anatomical, and psychomotor analysis of human movement. Emphasis will be placed on structure and function of bone and muscle, statics, dynamics, kinematics, and kinetics. In addition, psychological and physiological characteristics that influence skill learning; behavioral changes related to the states of skill learning; the influence of various types of practice conditions and feedback on skill acquisition will be examined and related to the utilization of biomechanical, anatomical, and physiological data.

- 2002. **Exercise Leadership** 2(1-2)
Prerequisites: Sophomore standing, Athletic Training and Exercise Physiology Department majors only. Required for Exercise Physiology majors.
A comprehensive theory and practice course to prepare students to function as

sports/exercise science practitioners with individuals and small groups in commercial, education, and clinical environments. Includes a combination of science-based theoretical lectures addressing the exercise programming of individuals, practical exercise leadership experience with individuals and small groups, and regular student participation in a variety of physical activity modalities according to ACMS/NSCA/ASEP/USOC recommendations. Satisfies two exercise physiology activity course requirements.

2213. First Aid and Safety (TCCNS = PHED 1306) 3(3-0)

Safety in the home, school, on the playground, and in traffic. Study of the physiology of injury and practice in first aid, bandaging, and care of common injuries. Students must pass a national CPR certification exam.

2333. Nutrition (TCCNS = HECO 1322, TECA 1318) 3(3-0)

Prerequisites: One year of biology.

A directed study of the effects of diet on health and physical activity. Topics addressed include nutrient metabolism, weight control, health-related fitness, supplementation, pharmacology, and drug interactions.

2501. Physiology of Sport and Fitness Lab 1(0-2)

Prerequisite: EXPH 2503 or concurrent enrollment.

Laboratory sessions examining the physiological effect of work on the functions of the human body.

2503. Physiology of Sport and Fitness 3(3-0)

Co-requisite: EXPH 2501.

A study of human physiology relevant to coaches and fitness professionals. A secondary focus of the course is practical experience in field-based physiological measures of fitness and performance.

3331. Sport and Exercise Pharmacology 1(1-0)

Prerequisite: Junior standing in Exercise Physiology or Athletic Training.

A survey of important pharmacological concepts and agents relevant to health, sport, and fitness professionals.

3913. Therapeutic Exercise (formerly 4813) 3(3-0)

Prerequisites: EXPH 1983 and permission of the instructor.

Theory and practice of methods of rehabilitating injured athletes and patients in order to return them to participation in exercise and sports in a safe and healthy manner. (Same as ATRN 3913.)

4676. Internship in Exercise Physiology 6 semester hours

Prerequisites: Completion of 15 hours of major and permission of instructor.

Students must complete 288 hours in an approved setting which offers professional experience in exercise physiology.

4701. Exercise Physiology and Clinical Assessment Laboratory 1(0-2)

Prerequisites: EXPH 2503, and 4703 or concurrent enrollment.

An in-depth laboratory study of physiological principles of exercise testing and training program prescription.

4703. Exercise Physiology and Clinical Assessment 3(3-0)

Prerequisite: Junior standing in Exercise Physiology or Athletic Training.

Co-requisite: EXPH 4701.

An in-depth study of physiologic principles of exercise and exercise testing in clinical and research settings. Topics include metabolism, diagnostic exercise assessment, cardiovascular physiology, ECG interpretation, American College of Sports Medicine guidelines for exercise testing and exercise prescriptions.

4953. Clinical Exercise Physiology I 3(1-5)

Prerequisites: Junior or senior standing in Exercise Physiology, ENGL 3203, EXPH 1983, 2503, and 4703.

Directed development and practice of theories, concepts, and skills specific to clinical allied health applications. Emphasis on student synthesis of prior curricular materials into useful client- and patient-centered activities in approved professional environments.

4963. Clinical Exercise Physiology II 3(1-5)

Prerequisites: Junior or senior standing in Exercise Physiology, ENGL 3203, EXPH 1983, 2503, 4703, and 4953 (or concurrent enrollment).

Continuation of EXPH 4953.

4973. Cycle Testing Protocols 3(3-0)

A study of testing protocols specific to human physiology and relevant to cycling participants, coaches, and fitness professionals. The tests would include but not be limited to the following: maximal oxygen consumption, heart rate, ventilation, height, weight, body fat, power output, and blood lactate.

4983. Cycle Training Protocols 3(3-0)

A study of training protocols specific to human physiology adaption responses and relevant to cycling participants, coaches, and fitness professionals. The training would include but not be limited to the following: sport specificity, periodization, threshold training, and recovery.

4991, 4992, 4993. Independent Study in Exercise Physiology 1-3 semester hours

Prerequisites: Junior or senior standing in exercise physiology and permission of instructor.

Specialized studies in the scientific and applied areas of the exercise sciences.

CRIMINAL JUSTICE

Nathan R. Moran, Chair (Martin Building 105)

Associate Professor: Moran

Assistant Professor: Fidelie

Instructor: Paddack

Professor Emeritus: Grant

Criminal Justice is a discipline that encompasses the preservation and protection of social order in a free society. It includes such principles as democracy, rule of law, constitutionalism, civil liberties, and the safeguarding of citizens against intimidation and oppression. The Criminal Justice curriculum, which is based on the University's liberal arts core, is designed to prepare students for higher education or entering careers in criminal justice. Graduates are expected to continue their personal and professional development in a variety of practical settings. To achieve this mission, four dimensions of development serve as a basis for the curriculum.

- (1) **Knowledge, Reasoning, Judgment:** The Criminal Justice curriculum provides students the opportunity and assistance to acquire knowledge of the roles of policing, courts, laws, corrections, and international affairs as they contribute to social order. Students will gain knowledge of the history, concepts, and critical issues in these areas through criminal justice required courses. The curriculum further provides a theoretical foundation of the discipline, combined with a thorough understanding of the scientific methods, as it applies to criminal justice. This combination is expected to sharpen the students' reasoning and judgment – qualities imperative to rational functioning in the discipline.
- (2) **Ability, Skills, Integration:** The Criminal Justice curriculum provides students with the ability to achieve the professional goals of criminal justice. Students will learn how to prudently integrate knowledge and practice in criminal justice. Furthermore, the curriculum provides students with an opportunity to develop the individual and group skills necessary to meet various role expectations.
- (3) **Conduct, Professionalism, Ethics:** The Criminal Justice curriculum will provide graduates with an appreciation for the complexity and dilemmas associated with the criminal justice profession. Criminal Justice students will be exposed to the moral and ethical dimensions of the various careers within the discipline and will be charged with the essential aptitudes necessary for their professional conduct.
- (4) **Vision, Change, Adaptation:** The Criminal Justice curriculum will provide students with an understanding of the discipline as it currently exists and as it is envisioned in the future. The Criminal Justice student will be able to apply vision in the face of change and to respond to the evolving nature of criminal justice and society. Furthermore, students will be equipped with the tools of adaptation for making these changes.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN CRIMINAL JUSTICE DEGREE

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

Additional Program Requirements

One year in one foreign language OR six to eight additional hours of science.

NOTE: The foreign language taken may be used for both the University's humanities requirement, as well as the CRJU additional 6-8 hours of foreign language, but **cannot** be counted twice towards the total 120 hours needed to graduate.

REQUIREMENTS FOR A MAJOR IN CRIMINAL JUSTICE (NO MINOR)

Major (48 semester hours)

Forty-eight semester hours to include CRJU 1113, 2213 or 2223, 2233 or 2243, 2933, 2943, 3213, 3713, 4213, 4253, 4413, 4993, and 15 additional advanced hours to total 33 advanced hours.

REQUIREMENTS FOR A MAJOR IN CRIMINAL JUSTICE (WITH A MINOR or DUAL MAJOR)

Major (36 semester hours)

Thirty-six semester hours to include CRJU 1113, 2213 or 2223, 2233 or 2243, 2933, 2943, 3213, 3713, 4213, 4253, 4413, 4993, and 3 additional advanced hours to total at least 21 advanced hours.

Minor to be selected in a field acceptable to the chair of the major and minor programs.

REQUIREMENTS FOR A MINOR IN CRIMINAL JUSTICE (21 semester hours)

Twenty-one semester hours to include CRJU 1113, 2213 or 2223, 2233 or 2243, 4213, 4253, and 6 additional advanced hours to total at least 12 advanced hours.

Progression Policy

1. In order to graduate, Criminal Justice majors must pass the following required Criminal Justice core courses with the grade of "C" (2.0 GPA) or higher:
CRJU 1113, 2213 or 2223, 2233 or 2243, 2933, 2943, 3213, 3713, 4213, 4253, 4413, and 4993.
2. Students not in compliance with this policy shall be ineligible for graduation until such time as the course(s) in question are retaken and passed with the grade of "C" (2.0 GPA) or higher.

COURSES IN CRIMINAL JUSTICE (CRJU)

1113. **Introduction to Criminal Justice** (TCCNS = CRIJ 1301) 3(3-0)
Studies the history, development, and philosophy of the criminal justice system. Introduces the agencies, theories and models involved in the administration of criminal justice.
2123. **Police-Community Relations** 3(3-0)
Prerequisite: CRJU 1113.
Intergroup relations between the police and the community with emphasis upon the importance of each understanding the problems and perspectives of the other.
2213. **Legal Aspects of Law Enforcement** (TCCNS = CRIJ 2323) 3(3-0)
Prerequisite: CRJU 1113.
Substantive law relating to law enforcement with special attention to Constitutional issues and case law. Emphasis on the application of statutes and cases to the enforcement of laws and liability of peace officers.
2223. **Legal Aspects of Corrections** 3(3-0)
Prerequisite: CRJU 1113.
Substantive and procedural law relating to corrections with special attention to Constitutional issues and case law. Emphasis on application of statutes and cases to basic rights of convicted persons.
2233. **Police Systems and Practices** (TCCNS = CRIJ 2328) 3(3-0)
Prerequisite: CRJU 1113.
Study of the police professions, organization of law enforcement systems, the police role, police discretion and ethics, and current and future issues.
2243. **Correctional Systems and Practices** (TCCNS = CRIJ 2313) 3(3-0)
Prerequisite: CRJU 1113.
Study of corrections in the criminal justice system including institutional operations, alternatives to institutionalization, and treatment and rehabilitation.

2933. **Judicial Systems and Practices** (formerly 3933) (TCCNS = CRIJ 1306) 3(3-0)
Prerequisite: CRJU 1113.
Study of the U.S. judicial system. Designed to familiarize the student with the criminal judicial process and the basics of criminal law and procedure.
2943. **Writing for the Criminal Justice Professional** 3(3-0)
Prerequisites: CRJU 1113; ENGL 1113 and 1123.
Research techniques and documentation styles, with emphasis on analyzing data and incorporating research findings into documented essays and research projects in the criminal justice environment. Upon completion, students should be able to summarize, paraphrase, interpret, and synthesize information from primary and secondary sources using standard research format and style.
3103. **Criminology** 3(3-0)
Prerequisites: 9 hours of CRJU courses, junior or senior standing.
Analysis of crime and delinquent behavior in the context of human deviance. Emphasis is placed on alternative explanations of the causes of criminal behavior, the degree of crime, community response to crime, and agencies of social control.
3113. **Organized Crime** 3(3-0)
Prerequisites: 9 hours of CRJU courses, junior or senior standing.
Historical review and activities of national and international organized crime groups. Emphasis is placed on the nature and concept of organized crime, both traditional and nontraditional, as well as the rise of the modern street gang. Focus is on emerging strategies used in the fight against organized crime.
3123. **Theories of Crime Analysis** 3(3-0)
Prerequisite: Junior or senior standing.
Overview of the theory behind the crime analysis process covering both basic and advanced concepts. Outlines major issues that crime analysts and crime analysis units must face. Essential study includes setting up a crime analysis unit, crime data, statistics, major investigations and the linking of criminals and their relationship to each other.
3133. **MS Office for Community Policing** 3(3-0)
Prerequisite: Junior or senior standing.
Overview of the crime analysis process using an application software (Microsoft Office). Essentials of understanding the usefulness of the software and the components in the office package and how it is applicable to crime analysis. Collection and analysis of data are studied through the import/entry process into the software.
3213. **Research Methods** 3(3-0)
Prerequisites: CRJU 1113, 2213 or 2223, 2233 or 2243, 2933, and 2943.
Methods and techniques of research in the administration of justice and other behavioral sciences. Historical development of psychological and social research, techniques and problems. Quantitative and qualitative methods of data collection through practical application and research design development.
3223. **Terrorism** 3(3-0)
Prerequisites: 9 hours of CRJU courses, junior or senior standing.
An overview of the fields of terrorism, counter-terrorism, and intelligence. Using a multi-dimensional approach that draws from international relations, law, and police strategies, the course emphasizes research and analysis. Students also gain the ability to examine and scrutinize international strategies aimed at reducing terrorist incidents.

- 3313. Law and Society** 3(3-0)
Prerequisites: 12 hours of CRJU courses; junior or senior standing.
Examination of the objectives, functions and limitations of criminal law and procedures. Analyzes such issues as substance abuse, victimology, domestic violence and civil liability for criminal justice practitioners.
- 3323. Emergency Administration** 3(3-0)
Prerequisite: Junior or senior standing.
An in-depth analysis of planning and administration for emergency management in the criminal justice environment (including public & not-for-profit sectors); the need for emergency planning, identification and allocation of resources, incident command procedure, and safety in the working environment.
- 3463. Community Corrections Supervision** 3(3-0)
Prerequisites: CRJU 1113, 2223 or 2243, and junior or senior standing.
Functions of probation, parole and specialized treatment of offenders within the community environment. Special attention is given to supervision issues, as well as methods and technologies used by community corrections practitioners.
- 3713. Ethical Issues in Criminal Justice** 3(3-0)
Prerequisites: 12 hours of CRJU courses; junior or senior standing.
A philosophical and applied knowledge of ethical and moral theories that impact the criminal justice system. Because the nature of criminal justice is control over others, it is imperative that the professional in this discipline understand how this control affects all citizens.
- 3723. Geographic Information Systems** 3(3-0)
Prerequisite: Junior or senior standing.
An overview of Geographic Information Systems (GIS) uses in criminal justice. Special emphasis is placed on GIS uses within law enforcement and hot spot analysis as a tool in reducing crime.
- 3733. Juvenile Delinquency** 3(3-0)
Prerequisites: 12 hours of CRJU courses; junior or senior standing.
Nature, extent, and causes of juvenile offenders and delinquency in the criminal justice system. Impact of gangs and violence among youth, delinquency prevention programs, and the institutional controls and correctional programs in the criminal justice system.
- 3743. Juvenile Justice** 3(3-0)
Prerequisites: 9 hours of CRJU courses; junior or senior standing.
Examines the juvenile justice system and the handling of juvenile delinquents in the United States. Specific attention is devoted to the history of the juvenile justice system and current police, court, and correctional policies and practices pertaining to juvenile offenders.
- 3913. Fundamentals of Criminal Investigation** (formerly 2913) 3(3-0)
Prerequisite: Junior or senior standing.
Introduction to criminal investigation. Consideration of conduct at the crime scene, including the recognition, collection, and preservation of evidence. Fundamentals of the interview, interrogations, the use of informants, and surveillance techniques. Particular attention to identifying the various elements of specific offenses.
- 3923. Criminal Intelligence** 3(3-0)
Prerequisite: Junior or senior standing.

An overview of the criminal intelligence process. Emphasis is placed on defining criminal intelligence, issues facing crime analysts and crime analysis units, and practical application in law enforcement.

4123. Educational Security 3(3-0)

Prerequisite: Junior or senior standing.

Examines school safety and security, including school security issues, emergency preparedness, legal aspects of school law enforcement, emergency response, crisis management, crime prevention, and the use of deterrents.

4143. Family Law 3(3-0)

Prerequisites: 12 hours of CRJU courses; junior or senior standing.

Examines U.S. family law and family court system, and the interaction between family law and the criminal justice system. Explores the unique challenges that family law issues present to law enforcement and the legal system. Emphasis on family violence, marriage, marriage dissolution, marital agreements, child custody, child and spousal support, child abuse and neglect, parental rights, and adoption.

4203. Civil Liability for Criminal Justice Professionals 3(3-0)

Prerequisites: 12 hours of CRJU courses; junior or senior standing.

Examines the growing prevalence of civil liability within the U.S. criminal justice system. Special emphasis is placed on liability for law enforcement and corrections professionals. Topics covered include the foundations for civil liability under state and federal law, use of force liability, medical care liability, damage recovery, and defenses to civil liability.

4213. Criminal Law 3(3-0)

Prerequisites: 12 hours of CRJU courses, junior or senior standing.

Purpose and goals of criminal law and a study of the historic development of its basic concepts. Examines substantive criminal law with emphasis on Texas Criminal Law. Emphasis on analyzing recent court cases and interpretations, as well as a comparison of federal and model codes as they relate to the penal law of the State of Texas.

4223. Criminal Procedure 3(3-0)

Prerequisites: 12 hours of CRJU courses, junior or senior standing.

Procedural laws of the State of Texas with particular attention to the provisions of the Code of Criminal Procedure. Analysis of constitutional and other limitations, court interpretation and recent Federal statutory provisions as they relate to criminal procedure.

4233. Constitutional Law 3(3-0)

Prerequisites: 12 hours of CRJU courses, junior or senior standing.

Development and interpretation of select Amendments of the United States Constitution specific to the criminal justice practitioner and the administration of justice.

4253. Comparative Criminal Justice Systems 3(3-0)

Prerequisites: CRJU 1113, 2213 or 2223, 2233 or 2243, 2933, and 2943, junior or senior standing.

The study of criminal justice in societies other than the United States including, but not limited to, the European region, the Asian region, and the African region. Emphasis is on the uncommon roots of criminal justice in these regions and the effectiveness of such systems in responding to criminal behavior.

- 4263. Correctional Counseling** 3(3-0)
 Prerequisites: 9 hours of CRJU courses, junior or senior standing.
 Various treatment modalities as they may be applied by correctional practitioners in carrying out the sentence of the court. Course includes strategies for interviewing and dealing with difficult offenders. These theories are the foundation for the changes that are desired in the “correcting” of deviant criminal behaviors.
- 4273. Homeland Security** 3(3-0)
 Prerequisite: Junior or senior standing.
 Principles and practices associated with the emerging discipline of homeland security. Policies, directives, national plans, and legislation that shape and define the ongoing evolution of homeland security. Key issues include civil liberties and diversity. Relationship to public safety, private security, and national security.
- 4283. Crimes Against Children** 3(3-0)
 Prerequisite: Junior or senior standing.
 Examines criminal activity targeted against children. Physical and sexual abuse, neglect, kidnapping, and sexual exploitation of children. Special attention is focused on the dynamics of the relationship between victims and offenders and how that relationship affects the investigation and prosecution of criminal acts.
- 4333. Contemporary Correctional Issues** 3(3-0)
 Prerequisites: 12 hours of CRJU courses, junior or senior standing.
 Various concerns affecting efficient delivery of services involving convicted criminal offenders. Special emphasis is given to using guest expert practitioners in the field to facilitate understanding difficult contemporary problems in the corrections profession.
- 4403. Profiling Criminal Behaviors** 3(3-0)
 Prerequisites: 12 hours of CRJU courses, junior or senior standing.
 Students will study the behavioral profiles of persons who commit violent criminal acts. Concepts of victimology, crime scene indicators, staging, personation and serial crime are thoroughly discussed. The study of homicide, arson and sexual assault comprise the majority of the course, with additional attention given to domestic abuse, stalking, workplace/school violence, hostages and assassins.
- 4413. Administration of Justice** 3(3-0)
 Prerequisites: 9 hours of CRJU courses, junior or senior standing.
 Principles and procedures for the administration of criminal justice agencies. Introduction to modern management techniques and application of skills required for pragmatic criminal justice issues. Special emphasis includes labor relations, contract negotiations, budgeting, and other relative matters.
- 4773. Internship in Criminal Justice** 3 semester hours
 Prerequisites: CRJU major, junior or senior standing.
 Field experience in selected criminal justice agencies. May be repeated for credit up to 12 hours.
- 4901. Independent Studies** 1(1-0)
 Prerequisites: CRJU major, minimum of 2.5 cumulative GPA with a 3.0 GPA in the major, senior standing.
 Supervised reading in the field of criminal justice.

4902. **Independent Studies** 2(2-0)
 Prerequisites: CRJU major, minimum of 2.5 cumulative GPA with a 3.0 GPA in the major, senior standing.
 Supervised reading in the field of criminal justice.
4903. **Independent Studies** 3(3-0)
 Prerequisites: CRJU major, minimum of 2.5 cumulative GPA with a 3.0 GPA in the major, senior standing.
 Supervised reading in the field of criminal justice. May be repeated for credit when topics vary.
4923. **Seminar in Criminal Justice** 3(3-0)
 Prerequisites: 12 hours of CRJU courses, junior or senior standing.
 Study and research of specific issues in the criminal justice system. May be repeated for credit when topics vary.
4943. **Research Practicum** 3(3-0)
 Prerequisites: 21 hours of CRJU courses, senior standing, and department chair approval.
 Supervised training to include special applications in information acquisition, storage, analysis, and display in criminal justice. May be repeated once for a total of 6 hours of credit.
4993. **Capstone** 3(3-0)
 Prerequisites: Major in Criminal Justice and senior standing; CRJU 1113, 2213 or 2223, 2233 or 2243, 2933, 2943, and 3213.
 The integration of knowledge concerning the criminal justice system, criminal law, criminology, juvenile delinquency, law enforcement, corrections, administration, legal aspects, and research methods. Restricted to students receiving the baccalaureate degree in Criminal Justice. Registration is required during the final semester of the student's senior year in which the degree is to be received.

DENTAL HYGIENE

Barbara DeBois, Chair (Gaines Clinic, J.S. Bridwell Hall)

Associate Professor: Davis

Assistant Professors: Crump, Curran, DeBois

MISSION STATEMENT FOR THE DENTAL HYGIENE PROGRAM

The mission of the Midwestern State University Dental Hygiene Department is to prepare dental hygienists who will provide competent and compassionate oral health care to individuals as well as communities. To prepare oral health care providers with strong clinical skills and ethical professional values, and the ability to recognize and respect diversity of thought in the global community. Faculty will facilitate learning and guide students to their own potential through role modeling and sensitivity to them as individuals. The department strives to create a positive and rewarding academic environment that facilitates continued growth and enrichment of all students and faculty. To encourage an interdisciplinary approach between dental hygiene and dentistry as well as other health professional components, the maintenance of high standards of evidence-based patient care, and life-long learning and service to the community.

The Bachelor of Science in Dental Hygiene (123 semester hours)

The Dental Hygiene Department offers the Bachelor of Science in Dental Hygiene degree (BSDH). The curriculum consists of (1) the dental hygiene prerequisite courses and the University core curriculum taken during the freshman and sophomore years (57 hours + 2 activity courses) and (2) the dental hygiene courses (64 hours) taken during the junior and senior years, after acceptance into the Dental Hygiene Program. Acceptance into the University does not constitute acceptance for admission into the Dental Hygiene Program. Entrance into the Dental Hygiene Program is competitive and limited to the number of clinical positions available in the M.S.U. Gaines Dental Hygiene Clinic (18). A new class is accepted each April for entry into the program the following fall semester.

The Dental Hygiene Program is accredited by the American Dental Association Commission on Dental Accreditation. Completion of degree requirements enables the graduate to take the National Board Dental Hygiene Examination and the State Board Clinical/Jurisprudence Examinations for licensure. The Texas State Board of Dental Examiners has set guidelines and criteria regulating the eligibility of persons with criminal convictions, mental illness, and/or chemical dependency to obtain a license to practice dental hygiene in the state of Texas. All applicants applying for licensure must complete a Fingerprint Criminal Background Check before submitting an application for initial licensure. (Detailed information is available from the Texas State Board of Dental Examiners - <http://www.tsbde.state.tx.us> - Texas Occupations Code, Title 3, Chapter 263.) A student who has concerns in this area is encouraged to contact the Dental State Board in the state in which he/she wishes to practice early in his/her academic career. Dental hygiene is classified as a Category I level (high-risk) profession for bloodborne pathogens, according to OSHA standards.

A person with certain musculoskeletal conditions may have difficulty performing the daily activities required in the profession of dental hygiene. These include, but are not limited to, degenerative conditions or injuries to the neck, back, shoulder, elbow, wrist, and/or hands. Examples: herniated or bulging disks, chronic rotator cuff symptoms, and carpal tunnel syndrome. It is strongly recommended that individuals with any of these conditions be evaluated by their physician prior to pursuing the dental hygiene degree.

ADMISSION POLICIES

To be considered for admission, the following basic requirements must be met by candidates on or before April 1 (for the following fall's entering class):

1. Be eligible for admission to M.S.U.
2. Submit a dental hygiene application and most recent transcripts depicting completed courses, as well as courses in progress, directly to the MSU Dental Hygiene Department with the \$25.00 application fee. Dental Hygiene applications can be downloaded from the MSU Dental Hygiene website at <http://hs2.mwsu.edu/dental>.
3. Present a minimum cumulative GPA of 2.50 and a minimum science GPA of 2.50 for all attempted or completed BSDH prerequisite and core academic courses.
4. Provide documentation of work experience or 80 hours of observation in a dental office. The documentation form can be downloaded from the MSU Dental Hygiene website listed in #2 above.
5. Complete the Health Occupations Basic Entrance Test (HOBET) **OR** the Nursing Entrance Test (NET) with a score of 63% or higher in **BOTH**, *Main Ideas of Passage* AND *Reading Comprehension*. Exams may be taken only two times

within a six month time frame. Contact MSU Testing Services at 940-397-4676. Only HOBET or NET will be accepted, no exceptions. Exams can be taken at sites other than MSU.

6. Successfully complete the following courses prior to entering the Dental Hygiene Program. Recommended degree plan can be downloaded from the Dental Hygiene website listed in #2 above.

Dental Hygiene Science Prerequisites (18 semester hours):

BIOL 1134, 1234, 2144
CHEM 1303
Nutrition (3 hours)

Basic Core (27 semester hours):

POLS 1333, 1433
ENGL 1113, 1123
MATH - 3 hours college level (other than developmental)
HIST 1133, 1233
SPCH 1133, 1233, or 2423
Demonstrate computer literacy by taking a proficiency test or earning credit for CMPS 1013, 1033, 1044, or EDUC 1023 – 3-4 hours

Additional Academic Course Work (14 semester hours):

Fine Arts (3 hours)
HUMN (3 hours)
EXPH (2 activities)
PSYC 1103
SOCL 1133

APPLICANT SELECTION PROCEDURES

Due to the limited availability of clinical positions, the selection process for admission into the Dental Hygiene Program is based upon a ranking system. Applicant ranking will be based upon, but not limited to

- GPA of prerequisite courses (cumulative GPA and science GPA)
- Number of prerequisite and core courses completed with a grade of B or better
- Number of prerequisite and core courses in progress at application deadline
- Previous dental-related experience
- Dental Hygiene Program Application
- Performance on the Health Occupations Basic Entrance Test (HOBET) or the Nursing Entrance Test (NET)

For additional information on application procedures, admission requirements, and applicant ranking computations, visit the department website at: <http://hs2.mwsu.edu/dental>

PROGRESSION POLICY

Dental hygiene courses must be taken in the sequences prescribed. The lack of satisfactory completion of such courses in sequence will result in suspension from the program until the courses can be repeated. Requirements are as follows:

1. A student must attain a grade of 75 (C) or above in each of the dental hygiene major courses:
MAJOR REQUIREMENTS (64 semester hours) Dental Hygiene 3002, 3003, 3005, 3013, 3014, 3022, 3023, 3102, 3114, 3124, 4003, 4013, 4018, 4022, 4023, 4032, 4038, 4103.
2. Failure to attain a minimum grade of 75 in any course will prevent the student from progressing in the program until the course(s) can be repeated. Dental hygiene courses are offered only once per academic year; therefore, failure of a course(s) will require a student to sit out for a full year.
3. A student who fails to achieve a grade of 75 in any of the dental hygiene courses may repeat the course only once with the approval of the BSDH Program Admissions Committee. Failure to achieve a minimum grade of 75 when repeating a dental hygiene course results in dismissal from the program, and the student may not reapply to this Dental Hygiene Program.
4. A student who withdraws from the Dental Hygiene Program and/or the University must go through the dental hygiene admissions process again to be readmitted.
5. The BSDH Program Admissions Committee reserves the right to make exceptions to the above due to extenuating circumstances.

ADDITIONAL REQUIREMENTS

Prior to enrollment in Clinical Practice I (DNHY 3114), the student must provide documentation of

1. An eye examination within the preceding six months.

Prior to enrollment in Clinical Practice II (DNHY 3005), the student must provide documentation of the following requirements. These requirements will be discussed with the student during Clinical Practice I.

1. Program-approved student liability insurance.
2. Completion of physical examination.
3. Health insurance.
4. State and program mandated immunizations.

TRANSFER POLICIES

Only students transferring from an accredited dental hygiene program will be considered for admission with advanced standing. Transfer students will be considered on a space available basis and must meet the following criteria:

1. Transfer students must meet the admission requirements of the University and the Dental Hygiene Department.
2. Students must submit an application to the MSU Dental Hygiene Department by April 1 for the following fall admission.
3. Progression requirements for these students are identical to those of the MSU dental hygiene students.
4. Students wishing to transfer dental hygiene courses from another dental hygiene program must meet the following criteria:
 - a. Dental hygiene courses to be transferred were completed at a CODA accredited dental hygiene program.
 - b. A grade of B or better was earned in all dental hygiene courses.

- c. A written statement from the Dean or Chair of the previous program must accompany the application form. The statement must indicate that the student is in good academic standing and is eligible for readmission to the program from which he or she is transferring.
 - d. Documentation on dental hygiene courses the student would like to transfer into the MSU Dental Hygiene Program must be submitted in a well-organized notebook to the Chair of the department. A copy of the letter of good standing must accompany the notebook, as well as a copy of the admission application. The faculty of record for selected courses will review the packet for equivalency to MSU dental hygiene courses.
 - e. All potential transfer students are reviewed by the Dental Hygiene Admissions Committee, which will make recommendation, regarding admission and placement.
5. Transfer credit will be evaluated according to University policy.
 6. Transfer students must earn 31 semester credit hours in 3000/4000 level courses at MSU.

COURSES IN DENTAL HYGIENE (DNHY)

3002. Oral Radiology I 2(2-0)

An in-depth introduction to dental radiography. Subject matter includes the history of dental x-rays; theoretical aspects of x-ray production, the x-ray machine; radiation protection; applications of dental x-ray film; normal radiographic anatomy; and patient education.

3003. Dental Hygiene II 3(3-0)

Prerequisites: DNHY 3014, 3114. Concurrent enrollment in DNHY 3005 (Clinical Practice II).

This course focuses on the knowledge necessary to instruct dental patients in prevention of oral diseases with a study of professional and patient-utilized plaque removal techniques and aids as they apply to various age groups of patients, use of fluorides, oral irrigation, care of hypersensitive teeth, and cleaning of dental appliances. Discussion of basic research methodology in regard to product evaluation. An examination of common physical characteristics of various age groups with emphasis on how these might affect treatment, as well as content of patient education. Includes discussion and analysis of the patient/healthcare provider relationship regarding ethical and legal responsibilities of each.

3005. Clinical Practice II 5(0-10)

Prerequisites: DNHY 3014, 3114. Concurrent enrollment in DNHY 3003.

Further development of skills acquired in prerequisite Clinical Practice course through treatment of clinical patients under close supervision of program faculty. Introduction and development of selective polishing procedures and practical application of professional methods utilized to clean dental appliances.

3013. Dental Materials 3(2-2)

Study of the materials used in restorative dentistry and in various other specialty areas of dentistry to fabricate dental appliances and tooth restorations. This course includes lecture and laboratory components designed to help students develop an understanding of the composition, properties, structure, and manipulative variables of dental materials historically used in dentistry, as well as the most current materials available. Emphasis is placed on practical, clinical applications of materials; the dental hygienist's role in educating patients regarding these materials; and the techniques for placement of the materials in the oral cavity.

3014. Dental Hygiene I (formerly 3113) 4(4-0)

Prerequisite: Admission procedures completed or consent of Dental Hygiene Department Chair. Concurrent enrollment in DNHY 3114 (Clinical Practice I).

Overall orientation to program, review of the history of the dental hygiene profession, discussion of institutional accreditation and individual licensing, and an introduction to the current dental health trends, issues, research, and legislation influencing the dental hygiene profession as well as the changing role of the dental hygienist. Emphasis is placed on a study of the prevention of disease transmission, content and rationale for comprehensive assessment of health, dental, and periodontal status; content and rationale for treatment plans and summaries; and instrumentation techniques and patient education based on the needs of the individual patient. This course must be taken in conjunction with Clinical Practice I to achieve basic cognitive, psychomotor, and affective skills in patient care procedures.

3022. Histology 2(2-0)

Microscopic anatomy of the teeth and related oral structures. Subject matter includes an introduction to General Histology; the embryologic development of the face and oral cavity; development of teeth and their eruption; tooth enamel, dentin, cementum and pulp; periodontal ligament; salivary glands; dental caries; and the temporomandibular joint.

3023. Periodontology 3(3-0)

The study of the normal and pathological structures of the periodontium with emphasis on patient education by the hygienist for the prevention of periodontal disease and gingival problems. Includes information on various treatment modalities for management of periodontal disease.

3102. Oral Radiology II 2(1-2)

Prerequisite: DNHY 3002.

Hands on oral radiology; includes practical experience in both laboratory and clinical applications. Students gain experience in mounting and interpretation of dental radiographs. Also includes discussions of infection control in radiographic procedures, quality assurance in dental radiography, intra and extraoral film placement criteria, and principles of panoramic radiography.

3114. Clinical Practice I 4(0-8)

Prerequisite: Admission procedures completed or consent of Dental Hygiene Department Chair. Concurrent enrollment in DNHY 3014.

Application of didactic instruction from the course Dental Hygiene I (DNHY 3014) with emphasis on application of the principles of infection control, acquiring skills to detect and remove calculus and other tooth deposits, and assessment and documentation of patients' medical, dental, and periodontal status. Laboratory practice on manikins and clinical experiences on selected patients (fellow classmates).

3124. Head, Neck, and Dental Anatomy (formerly 3123) 4(4-0)

Detailed anatomy of dental structures with special emphasis on human dentition through study and identification of extracted teeth. Identification of components of the temporomandibular joint as well as nomenclature, osteology, osteous landmarks, muscles, nerves, vascular supply and drainage, and glands of the head and neck region.

4003. Pathology 3(3-0)

Introduction of the principles of human disease including pathogenesis, clinical appearance, and treatment. In certain instances, microscopic features will be discussed if they enhance the understanding of the disease process. A portion of the course is devoted to basic

principles of general pathology. The majority of the course is an overview of oral pathology with an emphasis on the dental hygienist's role in the recognition of oral disease.

4013. Dental Health Education 3(3-0)

Prerequisites: DNHY 3003, 3005, 3023.

This course builds on previously learned knowledge by integrating it with the concepts of learning theory and applications, motivation, and the physical, mental, emotional, social, and moral development of various age groups. Emphasis is placed on the interrelationship of physical (general, as well as oral), psychological, social, cultural, and economic influences in compliance and noncompliance with preventive dental health programs, techniques, and aides. It explores the dental hygienist's role in the assessment of patient needs, planning treatment and patient education strategies, and then implementation and evaluation of these activities. Introduction of objectives, curriculum development, and preparation of lesson plans for oral health presentations.

4018. Clinical Practice III 8(0-16)

Prerequisites: DNHY 3114, 3005, 3102. Concurrent enrollment in DNHY 4023.

Clinical practice continued in the Gaines Dental Hygiene Clinic as well as in extramural sites in the community. Furthers development of instrumentation and assessment skills acquired in prerequisite Clinical Practice courses on more difficult patients. Introduction and development of techniques for pit and fissure sealant placement, ultrasonic scaling, periodontal scaling and root planning. Enhances proficiency in exposing, developing, and assessing dental radiographs taken on patients by providing clinical application of didactic and laboratory instruction from prerequisite course in oral radiology, under instructor supervision.

4022. Dental Public Health 2(2-0)

Prerequisite: DNHY 4013.

Theory, methodology, and application of the principles of public health in relating the significance of oral health to total health, with special emphasis on the role of the dental team in public health programs and the use of a basic systems approach to the development of any public health program. Provides an overview of how statistics are used in research and development of public programs. Specific topics include but are not limited to study design, central tendency and variability, probability, repeated analysis of variance, data association and prediction, and the evaluation of research studies.

4023. Dental Hygiene III 3(3-0)

Prerequisites: DNHY 3003, 3005, 3102. Concurrent enrollment in DNHY 4018 (Clinical Practice III).

A study of the rationale, indications and/or contraindications, and utilization techniques for various procedures including pit and fissure sealants, ultrasonic scaling, periodontal scaling and root planning. The concepts of decision making are examined to help students become responsible and account for their actions. Recognition and management of life-threatening emergency situations are reviewed, with in-depth discussion of the etiological and/or precipitating factors, and the possible effects of these factors on the oral tissues. Emphasis is placed on the integration of this information with knowledge obtained in prerequisite courses to further develop critical thinking skills in obtaining comprehensive patient medical histories and development of dental hygiene treatment plans. This course must be taken in conjunction with Clinical Practice III to achieve cognitive, psychomotor, and affective skills in patient care procedures covered.

4032. Dental Hygiene IV 2(2-0)

Prerequisite: DNHY 4023. Concurrent enrollment in DNHY 4038 (Clinical Practice IV).

A study of the rationale, indications and/or contraindications, and utilization techniques for air-powdered polishing units. CPR recertification and a general review of dental hygiene science, as needed in preparation for the National Board Examination. Preparation for the transition from dental hygiene student to practitioner in private practice dental offices and/or public health institutions with guest lecturers; discussions on new developments in patient care; resume writing and job interviewing; patient and personal insurance; and legal/ethical issues facing health care providers. Other major concepts included are the political aspects of dental and dental hygiene care, decision making, responsibility, and accountability. The study of this content helps students develop responsibility for personal professional growth.

4038. Clinical Practice IV 8(0-16)

Prerequisites: DNHY 3114, 3005, 4018.

Clinical practice continued in the Gaines Dental Hygiene Clinic as well as in extramural sites in the community. Practice in the use of more advanced treatment modalities. Further development of instrumentation and assessment skills with limited instructor assistance. Student will assume responsibility for all aspects of dental hygiene treatment for each of their clinical patients, with limited instructor input and supervision.

4103. Pharmacology 3(3-0)

This course provides students the opportunity to study pharmacology as it relates to clinical dental hygiene. Drug references; prescriptions; drug action; various drug groups prescribed by physicians that affect dental hygiene care, and various drug groups used in dentistry are included for study.

HEALTH SERVICES ADMINISTRATION

The College of Health Sciences and Human Services offers courses in health services administration.

COURSES IN HEALTH SERVICES ADMINISTRATION (HSAD)

3213. The Art of Healing 3(3-0)

Prerequisite: Honors standing or permission of instructor.

Exploration of the expressive art to heal including holistic and complementary healing practices; discussion of general and empiric knowledge as well as practical application; analyzing of both historical and cultural anthropological health practices; examination of complementary/alternative healing practices and traditional medicine.

4006. Public Health – Determinants of Health Disparities – A Comparative International Perspective 6(6-0)

Course will investigate (1) the delivery of health care needs/services of selected populations in the U.S. and Great Britain; (2) the description of health disparities and measurement issues; (3) the determinants of health disparities: politics and health insurance coverage, economics, social and physical environmental factors, behavioral and emotional variables; (4) the impact of aging of the populations, increased racial and ethnic diversity and technological developments; (5) the intervention strategies and evaluation results. Each student will be expected to complete a substantial, original research paper or project to satisfy the six hour requirement. This course will only be taught as part of the British Studies program in London, England.

4103. End-of Life-Care

3(3-0)

This course provides students from multiple health care disciplines the opportunity to explore issues related to end-of-life care. Topics to be emphasized include legal issues, standards of care, advanced care planning, assisted suicide/euthanasia, medical futility, gaps and barriers to good care, pathophysiological changes associated with death, holistic assessment, the normal grieving process, communication and decision-making, pain management, mental health management, and symptom control.

JOHN AND NEVILS WILSON SCHOOL OF NURSING

Karen Polvado, Chair (J. S. Bridwell Hall 313)

Professor: Hamilton

Associate Professor: Polvado

Assistant Professors: Blankenship, Bowles, Close, Collins, Distel,

Genung, Gibson, Howard, Jansen, Leach, Lockhart, Mercer,

Nunneley, Roberts, J. Smith, D. Stewart, Walker, Williamson

Professors Emeriti: Flanders, Inman, Mezzo, Sportsman, Tickle

MISSION STATEMENT FOR THE NURSING PROGRAM

The mission of the Wilson School of Nursing is to prepare nurses who will provide competent and compassionate health care to individuals, families, groups, and communities. The nursing faculty values teaching/learning in an individualized, collegial environment inclusive of a variety of teaching methodologies. Building on a liberal arts foundation, this approach to both undergraduate and graduate nursing education develops students as leaders through collaborative identification of issues and the implementation of innovative, and creative health services.

THE BSN PROGRAMS

The Wilson School of Nursing offers curricula leading to a Bachelor of Science in Nursing (BSN). These curricula include a pre-licensure program for students who do not have a license to practice as a Registered Nurse and a post-licensure RN to BSN program for RNs who have graduated from hospital-based programs or who hold associate degrees in nursing.

These programs include general education courses that provide a foundation for understanding physiological, psychosocial, cultural, political, and economic factors influencing a person's health status. The nursing courses prepare the BSN graduate to provide holistic nursing care in a variety of complex environments that will enhance the optimal health of individuals, families, groups, and communities.

The RN to BSN program is a flexible option designed to meet the needs of the working RN. Nursing classes are offered via distance-learning methodologies with periodic visits to campus. Clinical experiences may be conducted in the geographical area in which the RN student resides. The RN to MSN program is available at MSU, and is fully described in the graduate catalog.

The BSN program is accredited by the Commission on Collegiate Nursing Education (CCNE) and the Texas Board of Nursing (BON). The program includes a total of 128 hours (60 hours nursing and 68 non-nursing hours) for the pre-licensure student and a total of 124

hours in the RN/BSN program (58 nursing hours, including 30 hours awarded through the Texas Nurses Association (TNA) Articulation Agreement, and 66 non-nursing hours).

Upon completion of the program, the graduates (pre-licensure BSN) are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN).

RECOMMENDATION FOR LICENSURE

University recommendation for application for RN licensure will be made upon satisfactory completion of the nursing curriculum.

INFORMATION REGARDING ELIGIBILITY TO WRITE NCLEX

The BON has established guidelines and criteria regarding the eligibility of persons with criminal convictions to obtain a license as a registered nurse. The BON may refuse to admit persons to its licensure examinations, may refuse to issue a license or certificate of registration, or may refuse to issue a temporary permit to any individual who has been convicted of a felony, a misdemeanor involving moral turpitude, or engaged in conduct resulting in the revocation of probation imposed pursuant to such conviction. A Federal Bureau of Investigation (FBI) criminal background check is required by the BON. Convictions for offenses other than traffic violations will be investigated.

The Texas Board of Nursing (BON) has established guidelines and criteria regarding the eligibility of persons with mental illness and/or chemical dependency to obtain a license as a registered nurse. The BON may refuse to admit persons to its licensure examinations, may refuse to issue a license or certificate of registration, or may refuse to issue a temporary permit to any individual who is unfit to practice by reason of mental illness or intemperate use of alcohol or drugs that could result in injury to patients or the public.

A student who has concerns in either of these areas should file a declaratory order with the Texas Board of Nursing (BON) early in their academic career. BON investigations may take up to a year. Detailed information is available from the Texas Board of Nursing at <http://www.bne.state.tx.us>.

ADMISSION INTO THE NURSING MAJOR (BSN, Pre-licensure)

1. Submit an MSU application to the University (application fee \$25). Student must be admitted to the University by July 1 for fall admission and November 1 for spring admission.
2. Request official transcripts from each university/college attended be mailed to MSU's Admissions Office.
3. Submit your application to the Wilson School of Nursing, which can be found at: http://hs2.mwsu.edu/nursing/bsn_prelicensure.asp.
Fall application dates: February 1 – March 15
Spring application dates: August 15 – September 30
Deadline is 11:59 p.m. on the final day.
Applications received before or after these time periods will not be considered.
4. Submit HESI AZ to:
Midwestern State University
Wilson School of Nursing
3410 Taft Blvd.
Wichita Falls, TX 76308

- **Scores must be received by the application deadlines** of March 15 (for fall) and September 30 (for spring).
 - Contact MSU Testing Center to schedule the HESI AZ exam.
 - HESI AZ exam may be taken at test sites other than MSU.
 - A minimum score of 80% on the Math section and on the English Language section to include Reading Comprehension, Vocabulary, and Grammar is required to be considered for program admission.
5. Have a grade of “C” or higher on all science courses.
 6. Complete the following courses prior to beginning nursing program: (May apply to program while enrolled in prerequisite courses).

Anatomy and Physiology I & II	Microbiology
Introduction to Sociology	Chemistry
Rhetoric and Composition I & II	General Psychology
Developmental Psychology	College-level math
 7. Complete following core courses (NOT required before admission into nursing program) required for the BSN degree before graduation:

Data Analysis	Computer Applications
Humanities (6 hours)*	General Economics or Macroeconomics
American Government (Texas)	Speech
American Government	Fine Arts (Music, Art, Theatre - 3 hours)
American History to 1865	American History since 1865
Two (2) Exercise Physiology activity courses	

* Humanities = humanities, western civilization, English literature, philosophy, or a 2 semester sequence of one foreign language.
 8. Provide documentation for the following requirements prior to beginning the clinical courses (2nd semester in program). These requirements will be discussed further with the student at a mandatory orientation once the student has been accepted into the program:
 - a. Completion of a physical examination;
 - b. Health insurance coverage;
 - c. Nursing student liability insurance;
 - d. Either American Heart Association Healthcare Provider CPR certification with hands-on skills or American Red Cross CPR/AED for the Professional Rescuer and Healthcare Provider certification with hands-on skills;
 - e. FBI Criminal Background Check; and
 - f. Ten Panel Urine Drug Screen.
 9. Be compliant with state of Texas-mandated and program immunizations.

NOTE: Admission to NURS 3212 – Family Health Assessment (spring or fall only) constitutes formal admission to the Wilson School of Nursing Program.

ADMISSIONS PROCESS

Since the number of applicants usually exceeds the number of students allowed for admission, all applicants will be awarded points for ranking purposes. The Wilson School of Nursing Admissions Committee will evaluate all applications and rank them according to the criteria point values listed below. Applicants will be accepted into the program as ranked for admission and according to the number of clinical positions available. For applicants with a tie score, the higher science GPA will receive the higher ranking position.

RANKING COMPUTATION

Criteria	Point Value
BSN core & prerequisite courses with a grade of “C” or above. *1 point deducted for each course repeated more than two (2) times.	2 points per course with grade of “C” or above, excluding exercise physiology activity courses (max. 42 points)
BSN prerequisite courses with a grade of “B” or above. *No credit for science courses taken more than two (2) times.	1 point per course with grade of “B” or above (max. 10 points) <i>A&P I & II, Microbiology, Chemistry, Math, English I & II, General Psychology, Intro to Sociology, Developmental Psychology</i>
BSN core and/or prerequisite courses currently in progress.	1 point per course
Cumulative GPA of all core and prerequisite courses.	1 point for each 0.10 over 2.50
GPA of BSN prerequisite courses.	1 point for each 0.10 over 2.50
Working Experience (minimum of 6 months in length).	1.5 points - LVN/LPN 1.0 point - CNA/EMT/MED Tech 0.5 point - Nurse’s Aid
Prerequisites completed or in progress at MSU.	2.0 points - 20 to 22 courses 1.0 point - 10 to 19 courses 0.5 point - 1 to 9 courses
Holds a bachelor’s degree (or higher)	1 point

NURSING CLASSES REQUIRED FOR THE BSN DEGREE (Pre-licensure)

NURS 3103	Introduction to Nursing* (Fall/Spring)	3
NURS 3203	Pathophysiologic Process* (Fall/Spring)	3
NURS 3211/3212	Family Health Assessment (Fall/Spring)	3
NURS 3253/3243	Basic Nursing Care (Fall/Spring)	6
NURS 3313	Pharmacology (Fall/Spring)	3
NURS 3412/3413	Mental Health Nursing (Fall/Spring)	5
NURS 3422/3423	Family Health Nursing Care I (Fall/Spring)	5
NURS 3503	Nursing Research (Spring/Fall)	3
NURS 4002/4013	Nursing of the Childbearing Family (Fall/Spring)	5
NURS 4022/4023	Family Health Nursing Care II (Fall/Spring)	5
NURS 4042/4053	Pediatric Nursing Care (Fall/Spring)	5
NURS 4152/4153	Community Health Nursing Care (Fall/Spring)	5
NURS 4304	Leadership in Nursing (Fall/Spring)	4
NURS 4612/4613	Clinical Decision Making (Fall/Spring)	5
Major Courses		60

*Courses may be taken prior to admission or concurrently with NURS 3211/3212.

If transfer credit causes the required nursing courses to total fewer than 60 hours, a Nutrition course may be used to reach the required total.

NON-NURSING COURSES/REQUIREMENTS FOR THE BSN DEGREE (Pre-licensure)

*Anatomy and Physiology I and II	8
*Microbiology	4
*Rhetoric and Composition I & II	6
*General Psychology	3
*Introduction to Sociology	3
*Developmental Psychology	3
*Chemistry (no lab required)	3
*College-level math (not developmental)	3
**Data Analysis (NURS 4123 recommended)	3
**Humanities (courses in literature, Western Civilization, humanities, philosophy, OR a two-semester sequence of a foreign language)	6
**General Economics or Macroeconomics	3
**American Government (two semesters)	6
**Survey of U.S. History (two semesters)	6
**Speech Communication, Voice and Diction, or Interpersonal Communications	3
**Two different activity courses	2
**Fine Arts (music, art, or theatre - no applied music) or MCOM 2213	3
**Computer Competency (proficiency exam or introductory computer course)	3
Writing Proficiency Requirement (Exam or ENGL 2113)	

*required prior to admission

**students should complete most of these requirements prior to admission, as the nursing curriculum in the final two (2) years constitutes full-time study.

ADMISSION INTO THE BSN PROGRAM (RN TO BSN/Post-licensure)

The student must

1. complete an application for admission to the BSN Program;
2. hold licensure as a Registered Nurse (Texas or designated State);
3. have official transcripts from all colleges/universities and/or diploma school of nursing sent to MSU Admissions;
4. meet TNA Articulation Agreement requirements;
5. complete the following courses prior to NURS 3203 and 3611/3612:
 - Anatomy & Physiology I & II
 - Microbiology
 - Chemistry 3 hours
6. provide documentation of the following prior to enrollment in clinical courses:
 - a. professional liability insurance;
 - b. completion of physical examination;
 - c. health insurance;
 - d. compliance with State or program mandated immunizations;
 - e. current licensure (GNs may enroll in one semester of nursing courses with the stipulation that they must pass the NCLEX-RN prior to completion of the course. If they do not pass NCLEX, no further progression in the RN to BSN program will be permitted until successful completion of NCLEX is accomplished.);
 - f. American Heart Healthcare Provider CPR;
 - g. criminal background check; and
 - h. ten panel urine drug screen.

NURSING COURSES REQUIRED FOR THE RN TO BSN DEGREE

NURS 3203	Pathophysiologic Processes (Fall/Spring/Summer)	3
NURS 3611/3612	Health and Physical Assessment Across the Lifespan (Summer)	3
NURS 3613	Nursing Research for Clinical Practice (Summer)	3
NURS 3701/3704	Advanced Nursing Seminar (Fall)	5
NURS 4143/4144	Community Health Nursing (Fall)	7
NURS 4313/4314	Nursing Management for the Registered Nurse (Spring)	7
TNA Articulation Agreement		<u>30</u>
Major Hours including Articulation Agreement Hours		58

NON-NURSING/ REQUIREMENTS FOR THE RN TO BSN DEGREE**Basic Core (27 semester hours)**

English 1113, 1123

History 1133, 1233

Mathematics 1053, or 1203, or 1233

Political Science 1333, 1433

Speech Communication - 3 hours

Demonstrate computer literacy by taking a proficiency test or earning credit for CMPS 1013, 1033, 1044, or EDUC 1023 – 3-4 hours

Academic Course Work (36 semester hours)

BIOL 1134, 1234, 2144

Chemistry - 3 hours (no lab required)

ECON 1333 or 2333

PSYC 1103, 3233

SOCL 1133

Data Analysis (recommend NURS 4123)

Fine Arts/Humanities (courses in music, art, theatre, literature, Western Civilization, humanities, philosophy, OR a two-semester sequence of a foreign language.) - 6 hours

Additional Requirements

Approved elective 3000- or 4000-level – to bring total to 120 semester credit hours, if needed.

Writing Proficiency Requirement (Pass exam or take and pass ENGL 2113)

ADDITIONAL INFORMATION FOR RN/BSN PROGRAM (See page 100 Special Academic Programs)**TIME LIMITATIONS**

BSN pre-licensure students must complete all clinical nursing courses within 4.5 years (9 long semesters) beginning with initial enrollment in NURS 3611/3612.

RN/BSN students must complete all nursing courses within a four-year period of time beginning with the first nursing course (excluding NURS 3203 Pathophysiology).

TRANSFER POLICY

1. Transfer students must meet the admission requirements of the University and the BSN Program.

2. Admission and progression requirements for these students are identical to those of the MSU BSN Program nursing students.
3. In addition, transfer students who wish to transfer nursing courses from another nursing program must meet the following requirements:
 - a. Nursing courses to be transferred were completed at a nationally accredited nursing program.
 - b. A grade of C or better was earned in all nursing courses and all science courses required by the MSU BSN Program.
 - c. A written statement from the Dean or Chair of the previous department to accompany the application form. Students must be in good academic standing and eligible for progression in the nursing program from which they are transferring.
 - d. Nursing courses students would like to transfer into the MSU Nursing program must be submitted in a well-organized notebook to the Chair of the Wilson School of Nursing. A copy of the letter of good standing shall accompany the notebook, as well as a copy of the admission application. The faculty of record for selected courses will review the packet for equivalency to MSU nursing courses.
 - e. Courses taken without formal admission into the transferring nursing program will not transfer for courses requiring formal admission into the MSU Wilson School of Nursing.
 - f. All potential transfer students are reviewed by the Student Affairs Committee, which will make recommendations regarding admission and placement.
4. Transfer credit will be evaluated according to University policy.
5. Students planning to take general education courses at another college before transferring to the MSU BSN Program should seek guidance from the MSU Health Sciences and Human Services Counselor before enrolling in the courses to assure equivalency with MSU requirements.
6. MSU students who are progressing satisfactorily will be given priority for all classes. Transfer students will be considered on an “as available” basis.
7. Transfer students must earn 31 semester credit hours in 3000/4000 level courses at MSU.

PROGRESSION POLICY FOR BSN PRE-LICENSURE AND RN/BSN PROGRAMS

Students must maintain satisfactory standards in classroom and clinical activities to be retained and to progress in the program. Requirements are as follows:

1. A minimum grade of C is required in the following science courses: BIOL 1134 (A & P I); BIOL 1234 (A & P II); NURS 3203 (Pathophysiology); BIOL 2144 (Microbiology); and chemistry. A grade lower than C precludes admission/progression.
2. A minimum grade of C is required in all nursing courses. Failure to attain a minimum grade of C in these courses will prevent the student from progressing in the program. A student who fails to achieve a minimum grade of C in any of the required nursing courses may repeat the course only once.
3. A student who is in the process of appealing a course grade through the Academic Appeals Committee may not enroll in any subsequent nursing courses for which the course under appeal is a prerequisite. If the student has early registered, then he/she will be administratively withdrawn from those courses.

4. Any student who withdraws from nursing courses and/or the University must petition the BSN Program's Student Affairs Committee in writing as to their intent prior to re-enrollment.
5. A student who is on University academic probation will not be admitted to the program.
6. Failure in any two (2) nursing courses (either the same course twice or two different courses) renders the student ineligible for progression in this nursing program and will result in the dismissal of the student from the program
7. The BSN Program's Student Affairs Committee reserves the right to make exceptions to the progression policies due to compelling circumstances. The Student Affairs Committee will consider petitions from students at its regular meetings.

READMISSION/REENTRY POLICY

1. A student seeking readmission after being ineligible to progress must wait 5 years before submitting a new application as described under Admission into the Nursing Major section of this catalog. The student will be evaluated on the basis of current criteria for admission and progression on a first qualified, first admitted basis.
2. A student who withdraws or has an interruption in his/her enrollment in nursing for longer than one semester must petition the BSN Program's Student Affairs Committee in writing prior to re-enrollment. An individual interview with the committee may be required.
3. A student who receives a D or F in a nursing course (other than NURS 3103, 3203, and/or 4123) must seek reentry to the nursing program by petitioning the BSN Program's Student Affairs Committee in writing.
4. If the student receives a D or F in the same or any two nursing course(s) (other than NURS 3103, 3203, and/or 4123), the student will be ineligible for reenrollment or re-entry in this nursing program.
5. A transfer student with a prior nursing course failure from another nursing program who fails a course with similar content in MSU's BSN Program is ineligible for readmission.
6. A student who has not been enrolled in MSU's BSN Program for three or more years will be required to attain a satisfactory score on a comprehensive exam for each nursing course previously completed and demonstrate clinical competency in selected nursing procedures before readmission will be granted. In addition, the time-limit of 9 long semesters applies.
7. The BSN Program's Student Affairs Committee reserves the right to make exceptions to the progression policies due to compelling circumstances. The Student Affairs Committee will consider petitions from students at its regular meetings.

COURSES IN NURSING (NURS)

3103. Theories and Concepts: Introduction to Nursing 3(3-0)

Prerequisite: Sophomore standing.

This course is an introduction to major concepts of concern in nursing: person, environment, nursing, and health. Nursing theories and ethical-legal principles related to professional nursing practice are studied. Also addressed are the concepts of critical thinking, communication, and cultural awareness in the context of nursing process.

3203. Pathophysiologic Process 3(3-0)

Prerequisites: BIOL 1134, 1234, 2144, and chemistry (3 hours).

The study of physiologic and psychosocial disorders with emphasis on dynamics of the

altered state. Focus is on interpreting diagnostic tests and predicting pathophysiological adaptations which may occur as a result of these disorders.

3211. Family Health Assessment Clinical 1(0-3)

Prerequisites: BIOL 1134 and 1234, Pre- or co-requisites: NURS 3103 (pre-licensure BSN); NURS 3203. Co-requisite: NURS 3212.

This is the clinical portion of NURS 3212.

3212. Family Health Assessment 2(2-0)

Prerequisites: BIOL 1134 and 1234, Pre- or co-requisites: NURS 3103 (pre-licensure BSN); NURS 3203. Co-requisite: NURS 3211.

The focus of this course is on the assessment of the holistic person as an individual member of families, groups, and communities (IFGC). The role of the nurse in health promotion throughout the life cycle is explored by identifying normal findings. Emphasis will be placed on acquiring skills to record client histories, to perform physical assessments, and to communicate specific findings.

3243. Basic Nursing Care 3(3-0)

Prerequisites: NURS 3103, 3203, 3211, 3212, ENGL 1113, 1123, MATH 1053 or 1233, PSYC 1103, 3233, and SOCL 1133, Co-requisite: NURS 3253.

The course emphasizes the application of beginning theories and concepts fundamental to patient care through the life cycle. In both campus laboratory and clinical experiences the student acquires basic cognitive and psychomotor skills. Students are introduced to the impact cultural diversity has on the outcome of patient care. The nursing process is used to apply knowledge and critical thinking through demonstration of theory-based patient care.

3253. Basic Nursing Clinical (formerly 3242) 3(0-9)

Prerequisites: NURS 3203, 3211, 3212, ENGL 1113, 1123, MATH 1053 or 1233, PSYC 1103, 3233, and SOCL 1133. Pre- or co-requisite: NURS 3313. Co-requisite: NURS 3244.

This is the clinical portion of NURS 3244.

3313. Theories and Concepts: Pharmacology in Nursing Practice 3(3-0)

Prerequisites: NURS 3103, 3203, and 3211/3212.

Explores the nurse's role in relationship to the principles of pharmacology and drug prototypes used to treat alterations or promote health in individuals, families, groups, and communities (IFGC) across the lifespan.

3412. Mental Health Nursing Clinical 2(0-6)

Prerequisites: NURS 3313, 3253, and 3244. Co-requisite: NURS 3413.

This is the clinical portion of NURS 3413.

3413. Mental Health Nursing (formerly 3406) 3(3-0)

Prerequisites: NURS 3313, 3253, and 3244. Co-requisite: NURS 3412.

Concepts and principles emphasized in this course include communication, interpersonal relationship, and utilization of the nursing process in providing nursing care for clients manifesting psychosocial and/or psychiatric needs. Clinical and classroom discussions provide students with opportunities to develop a greater understanding of self, and to increase their ability in relating to individuals, families, groups, and communities (IFGC) in structured and non-structured settings.

3422. Family Health Nursing Care I Clinical (formerly 3433) 2(0-6)

Prerequisites: NURS 3313, 3253, and 3243. Co-requisite: NURS 3423.

This is the clinical portion of NURS 3423.

3423. Family Health Nursing Care I (formerly 3434, 3407) 3(3-0)

Prerequisites: NURS 3313, 3253, and 3243. Co-requisite: NURS 3422.

Application of theories and concepts across the span of adult life to include specific medical-surgical conditions. Emphasis will be placed on integrating previously learned cognitive, psychomotor, and affective knowledge in the holistic care of the individual client, his/her family, as well as groups and communities (IFGC), through application of the nursing process.

3503. Theories and Concepts: Nursing Research 3(3-0)

Prerequisites: Undergraduate statistics course; NURS 3243/3253.

Basic concepts of research and related terminology are studied. Steps involved in conducting useful and sound research studies are explored. Focus is on analysis and evaluation of research reports/studies as they apply to nursing practice.

3611. Health and Physical Assessment Across the Lifespan Clinical 1(0-3)

Prerequisites: Admission to the RN to BSN or RN to MSN program; BIOL 1134 and 1234; NURS 3203 (may be taken concurrently). Must be taken with NURS 3612.

Focus of this course is on the holistic assessment of individuals to include adaptations for age, gender, and ability. The role of the nurse in health promotion throughout the life cycle is explored by identifying normal findings within the context of a therapeutic relationship. Emphasis will be placed on acquiring skills to build a health and physical assessments, and to communicate findings.

3612. Health and Physical Assessment Across the Lifespan 2(2-0)

Prerequisites: Admission to the RN to BSN or RN to MSN program; BIOL 1134 and 1234; NURS 3203 (may be taken concurrently). Must be taken with NURS 3611.

Focus of this course is on the holistic assessment of individuals to include adaptations for age, gender, and ability. The role of the nurse in health promotion throughout the life cycle is explored by identifying normal findings within the context of a therapeutic relationship. Emphasis will be placed on acquiring skills to build a health and physical assessments, and to communicate findings.

3613. Nursing Research for Clinical Practice 3(3-0)

Prerequisites: Admission to the RN to BSN program or RN to MSN program; Statistics or Data Analysis course (may be taken concurrently).

Basic concepts, processes, and applications of nursing research are explored. Focus is on analysis and evaluation of research in application to clinical practice.

3701. Advanced Nursing Seminar Clinical 1(0-3)

Co-requisite: NURS 3704.

This is the clinical portion of NURS 3704.

3704. Advanced Nursing Seminar 4(4-0)

Prerequisite: Admission to the RN to BSN program.

Co-requisite: NURS 3701.

Provides a foundational understanding of theories and concepts related to nursing practice coupled with topics and issues in medical-surgical, maternal-child health, and mental health nursing offered at an advanced level for the registered nurse student. Current health trends, issues, research, and legislation influencing professional nursing are investigated. The role of the professional nurse as a provider of care, a coordinator of care, and a member of the profession is explored with emphasis on the differences accompanying baccalaureate nursing education. Discussion includes topics relevant to clinical practice, research, and education;

and will include ethical, legal, political, and cultural aspects of health care, decision making, responsibility, and accountability.

4002. Nursing of the Childbearing Family Clinical 2(0-6)

Prerequisites: NURS 4022, 4023, 4042, 4053, and 4304. Co-requisite: NURS 4013.

This is the clinical portion of NURS 4013.

4013. Nursing of the Childbearing Family 3(3-0)

Prerequisites: NURS 4022, 4023, 4042, 4053, and 4304. Co-requisite: NURS 4002.

The focus of this course is on the application of theories and concepts used by the nurse to help childbearing families achieve their maximum potential. There is an emphasis on relationships within families, access to and use of resources, and lifestyle and cultural diversity. Reproductive processes and women's health issues are explored. The spectrum of nursing in various healthcare settings along with the process of decision making in healthcare is also explored.

4022. Family Health Nursing Care II Clinical 2(0-6)

Prerequisites: NURS 3411, 3412, 3413, 3422, and 3423. Co-requisite: NURS 4023.

This is the clinical portion of NURS 4023.

4023. Family Health Nursing Care II 3(3-0)

Prerequisites: NURS 3411, 3412, 3413, 3422, and 3423. Co-requisite: NURS 4022.

Provides a continuation of the application of theories and concepts across the span of adult life to include specific medical-surgical conditions. Emphasis is placed on integrating previously learned knowledge in complex situations with the individual, his/her family, as well as groups and communities (IFGC), through application of the nursing process.

4042. Pediatric Nursing Care Clinical 2(0-6)

Prerequisites: NURS 3412, 3413, 3422, and 3423. Co-requisite: NURS 4053.

This is the clinical portion of NURS 4053.

4053. Pediatric Nursing Care 3(3-0)

Prerequisites: NURS 3412, 3413, 3422, and 3423. Co-requisite: NURS 4042.

The focus of the course is on the application of holistic nursing principles and concepts used by the nurse to help families achieve their maximum potential. Emphasis is on interrelationships and intra-relationships of children and their families as well as appreciation of cultural diversity. Nursing process will be pediatric specific, with special consideration to developmentally appropriate nursing care and ethical decision making.

4103. Nursing Care in the United States 3(3-0)

Prerequisite: Student must be a Registered Nurse who is participating in the Global Scholarship Alliance Program.

The focus of the course is to prepare international registered nurse students for success in advanced nursing courses in the United States. Emphasis will be placed on concepts related to the U.S. health care delivery system and nursing practice in the U.S., in comparison to the home countries of the students.

4123. Data Analysis 3(3-0)

The focus of this course is to provide an interdisciplinary data analysis course specifically for health sciences and human services majors using techniques and data structures relevant to clinical investigations. General topics include choosing correct procedures and using statistics to understand clinical data. Specific topics include, but are not

limited to, basic statistics, measures of correlation and difference, hypothesis testing and bias, confidence intervals, reliability and validity, significance, power analysis, levels of evidence, sample size and distribution, assessing effects of treatment, quality improvement, relative risk and relative risk reduction, and odds ratio.

4143. Community Health Nursing Clinical 3(0-9)
Co-requisite: NURS 4144.
This is the clinical portion of NURS 4144.

4144. Community Health Nursing 4(4-0)
Prerequisite: Admission to the RN to BSN program or RN to MSN program.
Co-requisite: NURS 4143.
Students are exposed to a variety of settings where the nurse functions in the community. Concepts relevant to community health nursing of epidemiology, health promotion, health planning/teaching, cultural awareness, consumerism, legislation, and world health concerns are explored. Planning and providing nursing care for individuals, families, groups, and communities are related to community assessment, health promotion/patient education, and primary-secondary-tertiary prevention.

4152. Community Health Nursing Care Clinical 2(0-6)
Prerequisites: NURS 4022, 4023, 4042, 4053, and 4304. Co-requisite: NURS 4153.
This is the clinical portion of NURS 4153.

4153. Community Health Nursing Care 3(3-0)
Prerequisites: NURS 4022, 4023, 4042, 4053, and 4304. Co-requisite: NURS 4152.
The focus is on application of holistic nursing principles in the community. Application of nursing process within the community will be explored. Utilization of epidemiological data, health promotion, disease prevention, health planning/teaching, and issues of diversity will be emphasized at the local, state, national, and global levels.

4304. Leadership in Nursing 4(4-0)
Prerequisite: Senior standing in nursing.
Emphasis is on the management of nursing care and the management of personnel in health care settings. Theories of management, leadership, economics, and change are explored including the varying patterns of health care delivery and strategies for implementation. Case management as a nursing role in a managed care environment and strategies for implementation of the role are explored including the assessment and evaluation of quality within an organization.

4313. Nursing Management for the Registered Nurse Clinical 3(0-9)
Co-requisite: NURS 4314.
This is the clinical portion of NURS 4314.

4314. Nursing Management for the Registered Nurse 4(4-0)
Prerequisite: Admission to the RN to BSN program or RN to MSN program.
Co-requisite: NURS 4313.
Emphasis is on the management of nursing care and the management of personnel in health care settings expanding upon the expertise of the registered nurse. Theories of management, leadership, economics, and change are explored including the varying patterns of health care delivery and strategies for implementation. Case management as a nursing role in a managed care environment and strategies for implementation of the role are explored including the assessment of quality within an organization.

4403. **Special Topics** 3(1-3)
 Prerequisite: Senior standing or consent of Chair.
 Theoretical and/or clinical application of selected nurses issues.
4503. **Selected Nursing Issues** 3(3-0)
 Prerequisite: Consent of instructor or Chair.
 Selected nursing issues. To be conducted on an independent basis with the student and selected nursing faculty member. Issues may vary.
4612. **Clinical Decision Making Clinical** 2(0-6)
 Prerequisite: Must be taken in final semester. Co-requisite: NURS 4613.
 This is the clinical portion of NURS 4613.
4613. **Clinical Decision Making** 3(3-0)
 Prerequisite: Must be taken in final semester. Co-requisite: NURS 4612.
 This course is an application of clinical judgment skills. Emphasis is placed on integrating previously learned concepts and theories with the student in the role of coordinator of care. Critical thinking is applied in resolving actual clinical problems.

JOHN AND NEVILS WILSON DISTINGUISHED PROFESSORSHIP OF NURSING

Dr. Patti Hamilton, the John and Nevils Wilson Distinguished Professor of Nursing, has served as the Dean of the Graduate School at MSU. She is author of the book *Health Care Consumerism*. Dr. Hamilton has authored or co-authored more than forty publications including scientific articles, book chapters, and workbooks. She currently is the principal investigator for a research study funded by the Robert Wood Johnson Foundation. Her research interests include the work of nurses and patient care in off-peak hours and the effect of institutional structures on the decisions made by front-line workers in health care and education.

MINNIE RHEA WOOD DISTINGUISHED PROFESSORSHIP OF NURSING

The Minnie Rhea Wood Distinguished Professorship of Nursing was established in 2005 to support the teaching and research of a professor in the John and Nevils Wilson School of Nursing.

RADIOLOGIC SCIENCES

Donna Lee Wright, Chair (J. S. Bridwell Hall 201F)

Professor: Wright

Associate Professors: Comello, Johnston, Killion, Morrison, Phifer, Vealé

Assistant Professors: Sanders, Watts, Wilbanks

Professors Emeriti: Bugg, Zembrod

Midwestern State University offers three separate programs in the Radiologic Sciences: an entry-level Associate of Applied Science in Radiography; a post-certification Bachelor of Science in Radiologic Sciences; and one of the only discipline specific Master of Science in

Radiologic Sciences in the United States with majors in Radiologic Education, Radiologic Administration, and Radiologist Assistant.

ASSOCIATE OF APPLIED SCIENCE IN RADIOGRAPHY (72 semester hours)

The Radiologic Sciences entry-level AAS Program prepares students for careers as radiographers. Upon completion of all program requirements, students are prepared to take the national certification examination administered by the American Registry of Radiologic Technologists (ARRT). Additionally, graduates may be eligible for certification by the state of Texas as Medical Radiologic Technologists.

The AAS Program in Radiography is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The mission of the AAS program is to provide students with both the academic and technical foundations to competently and safely perform radiologic procedures, to prepare qualified imaging technologists who will ethically respond to the needs of patients with technical competence and compassion, and to assume a vital professional role as a medical team member. The learning outcomes of the AAS Program are that AAS students will

1. Be adequately prepared to enter the profession in a culturally diverse society.
2. Develop independent and critical thinking skills.
3. Pursue education beyond the entry level AAS Program.
4. Develop professionalism through entry-level radiography clinical competence.

ADMISSION CRITERIA FOR THE AAS PROGRAM

1. Be eligible for admission to Midwestern State University.
2. Complete the online AAS Program application on the department website at <http://hs2.mwsu.edu/radsci>.
3. Have a cumulative GPA of 2.5 or greater on all college-level work and be in good academic standing.
4. Complete BIOL1134, BIOL1234, RADS 1001, and RADS 1011 with grades of C or better.
5. Complete all remediation requirements.
6. Have reliable Internet access (high speed recommended) and a working email address.

ADMISSION PROCEDURES FOR THE AAS PROGRAM

The professional phase of the AAS program begins in the fall semester. Applications for entrance the following fall semester are accepted January 1 until March 1. Because of the limited availability of clinical sites, admission to the AAS is competitive, and qualified applicants are accepted only until the class is full. No applications will be accepted after March 1. Applicants are rank-ordered according to a formula based on, but not limited to, several criteria such as core course completion, grade point average, and previous experiences in medical environments.

For additional information on application procedures and admission requirements, visit the department website at: <http://hs2.mwsu.edu/radsci>

PROGRESSION POLICY FOR THE AAS PROGRAM

1. All professional (RADS) courses must be taken in the sequence prescribed.
2. Students must earn a C (2.0) or above in all professional courses.
3. Failure to attain a minimum grade of C in any professional course will prevent students from progressing in the program until the course(s) can be repeated. Each failed course can be repeated only once. Students who fail any professional course must reapply to the program. Students who fail more than one professional course or the same course more than once will be prevented from completing the program.
4. Prior to enrollment in RADS 2114 Clinical Education I, students must provide documentation of:
 - a. Program-approved student liability insurance
 - b. Compliance with state mandated immunizations
 - c. Health insurance
 - d. CPR certification (2 year certification for child and adult)
 - e. Compliance with program approved criminal background check
 - f. Drug screening with no illegal substances

CURRICULUM REQUIREMENTS FOR AAS PROGRAM

General Academic Courses (26 semester hours): BIOL 1134, 1234, ENGL 1113, 1123, College level math, Fine Arts/Humanities elective, PSYC 1103 or SOCL 1133; and CMPS 1013, 1033, or EDUC 1023.

Major (46 semester hours): RADS 1001, 1011, 1223, 1313, 1413, 1423, 1513, 2112, 2114, 2123, 2215, 2232, 2233, 2315, 2332, 2711, and 2912.

BACHELOR OF SCIENCE IN RADIOLOGIC SCIENCES (130 semester hours)

The Bachelor of Science in Radiologic Sciences degree is a post-certification program designed to meet the unique needs of registered radiologic technologists currently working in the field. The program offers a variety of courses designed to prepare students for advanced level examinations in specific modalities.

The mission of the BSRS Program is to prepare ARRT-registered technologists for advanced certification and to assume greater responsibilities in the profession. The learning outcomes of the BSRS Program are that BSRS students will

1. Be adequately prepared to enter and function within the profession in an advanced role in a culturally diverse society.
2. Develop independent and critical thinking skills.
3. Pursue life-long learning.
4. Develop professionalism through scholarly productivity.

All BSRS courses are offered online as full Internet courses.

ADMISSION CRITERIA FOR THE BSRS PROGRAM

1. Meet all MSU admission requirements.
2. Have a cumulative GPA of 2.0 or higher.
3. Be certified by the ARRT, NMTCB, ARDMS or be a second year student in an accredited Radiologic Sciences Program.

4. Have reliable Internet access (high speed required) and a working email address.
5. Meet Texas Success Initiative (TSI) requirements (see page 67), or submit a signed copy of the TSI Temporary Waiver Form for Distance Education Students found at <http://registrar.mwsu.edu/successdist.asp>.

ADMISSION PROCEDURES FOR THE BSRS PROGRAM

1. Submit all required admission materials to MSU Admissions.
2. Complete the online BSRS Program application on the department website at <http://hs2.mwsu.edu/radsci>.
3. Contact the Admissions Counselor for the College of Health Sciences and Human Services. Students will be assigned a Radiologic Sciences faculty advisor when they start taking professional courses (RADS prefixes).
4. Submit a working email address to the Admissions Counselor for the College of Health Sciences and Human Services.
5. Complete the online BSRS Program Orientation linked to the Radiologic Sciences website.

ADVANCED PLACEMENT PROCEDURES

Technologists registered by the ARRT may receive 46 semester hours of credit for RADS 1001, 1011, 1223, 1313, 1413, 1423, 1513, 2112, 2114, 2123, 2215, 2232, 2233, 2315, 2332, 2711, and 2912. To receive the hours of advanced placement credits, BSRS students must be graduates of accredited Radiologic Sciences Programs in Texas that have articulation agreements with MSU or be graduates of the USAF program. Other students must take the Advanced Placement Exam prior to graduation from MSU. Students should visit the BSRS website for more information.

Additional advanced standing credit is awarded to technologists certified in advanced registries. This credit is awarded as follows:

ARRT (T) - RADS 3313
 ARRT (N) or NMTCB - RADS 3803
 ART (BD) - RADS 3833
 ARRT (M) - RADS 4753
 ARRT (QM) - RADS 4623
 ARRT (CV) or (VI) or (CI) - RADS 3413
 ARRT (CT) - RADS 4783
 ARRT (MR) - RADS 4743
 ARRT (S) or ARDMS - RADS 4713

For additional information on application procedures, admission requirements or advanced placement procedures, visit the department website at: <http://hs2.mwsu.edu/radsci>

CURRICULUM REQUIREMENTS FOR THE BSRS PROGRAM

Academic Foundations and Core Curriculum for the BSRS degree (27 semester hours)

POLS 1333, 1433
 ENGL 1113, 1123
 HIST 1133, 1233
 SPCH 1133, 1233, or 2423
 College Level Math
 CMPS 1013, 1033, 1044, or EDUC 1023

Additional Basic Core for BSRS (6 semester hours)

Statistics

Elective - 3 hours

Additional 18 hours

Select from at least four of the following areas: social sciences, natural sciences, fine arts, speech communication, humanities, economics, and exercise physiology. Three hours must be from the fine arts or humanities areas.

BSRS students must also meet such MSU requirements for graduation as passing the Writing Proficiency Exam or taking ENGL 2113.

Major (79 semester hours)

RADS 1001, 1011, 1223, 1313, 1413, 1423, 1513, 2112, 2114, 2123, 2215, 2232, 2233, 2315, 2332, 2711, 2912, 3203, 3213, 3503, 3773, 4633, 4643, 4913, plus at least 12 semester hours from the following: 3023, 3313, 3413, 3803, 4433, 4513, 4523, 4623, 4713, 4723, 4733, 4743, 4753, 4763, 4773, 4783, 4813, 4823, 4833, 4903, and 4923.

Core Courses - Students take ALL seven (7) of these BSRS Core Professional Courses:

RADS 3203, 3213, 3503, 3773, 4633, 4643, 4913

Plus any combination of four (4) additional RADS courses.

The following are suggested Professional Courses for various interests:

Radiologic Sciences Administration

RADS 4433, 4513, 4523, 4623

Quality Management

RADS 4433, 4513, 4623, 4763

Radiologic Sciences Education

RADS 4513, 4813, 4823, 4833

Mammography

RADS 4433, 4753, 4763, and one RADS elective course

Computed Tomography

RADS 4433, 4723, 4733, 4783

Magnetic Resonance Imaging

RADS 4433, 4733, 4743, 4773

A student must earn a grade of C (2.0) or above in all RADS professional courses required for graduation.

COURSES IN RADIOLOGIC SCIENCES (RADS)

AAS PROGRAM RADIOLOGIC SCIENCES COURSES

1001. Introduction to Radiologic Sciences 1(1-0)

This course provides an overview of radiologic sciences for individuals considering entering the Radiologic Sciences program. Content includes the historical development of medical imaging and radiation therapy, basic principles of radiation protection, introduction to various modalities, professional communication, and ethical and legal issues for health care professionals. Learning Outcomes: The student will exhibit ethical and legal standards; demonstrate basic radiation protection practices; and relate the role of radiography to health care. (WECM = RADR 1201)

1011. Radiologic Sciences Medical Terminology 1(1-0)

This course provides a foundation of medical terminology for individuals considering entering the Radiologic Sciences program. Content includes basic medical word parts and terms plus terminology specific to the radiologic sciences. Learning Outcomes: The student will exhibit professional communication skills using appropriate medical terms and will demonstrate a solid foundation in the terminology unique to radiologic sciences. (WECM = RADR 1201)

1223. Patient Care 3(2-2)

Prerequisite: RADS 1413.

A course in patient assessment, infection control procedures, emergency and safety procedures, communication and patient interaction skills, and basic pharmacology. Learning Outcomes: The student will correctly assess patient conditions; demonstrate accepted infection control and general safety practices; respond appropriately to emergency situations; practice effective communication skills; and identify pertinent pharmaceuticals and their applications. (WECM = RADR 1303)

1313. Principles of Radiographic Imaging I 3(2-2)

Prerequisite: Admission to the program.

This course will analyze radiographic image qualities and the effects of exposure variables upon these qualities. Learning Outcomes: The student will define, recognize, and evaluate qualities of the radiographic image, and analyze the effects of exposure variables upon each image quality. (WECM = RADR 1213)

1413. Basic Radiographic Procedures 3(2-4)

Prerequisite: Admission to the program.

This course includes an introduction to radiographic positioning terminology, the proper manipulation of equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of basic anatomy and related pathology. Learning Outcomes: The student will define radiographic positioning terms; manipulate equipment properly; position and align anatomical structure and equipment; and evaluate images for proper demonstration of anatomy and pathology. (WECM = RADR 1311)

1423. Intermediate Radiographic Procedures 3(2-4)

Prerequisite: RADS 1413.

A continuation of the study of the proper manipulation of radiographic equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of

images for proper demonstration of intermediate anatomy and related pathology. Learning Outcomes: The student will manipulate equipment properly; position and align anatomical structure and equipment; and evaluate images for proper demonstration of anatomy and pathology. (WECM = RADR 2301)

1513. Radiographic Imaging Equipment 3(3-0)

Prerequisite: Admission to the program.

A study of the equipment and physics of x-ray production, basic x-ray circuits, and the relationship of equipment components to the imaging process. Learning Outcomes: The student will describe the equipment and physics of x-ray production; describe basic x-ray circuits; and relate equipment components to the imaging process. (WECM = RADR 2309)

2112. Radiation Biology and Protection 2(2-0)

Prerequisite: RADS 2232.

A study of the effects of radiation exposure on biological systems, typical medical exposure levels, methods for measuring and monitoring radiation, and methods for protecting personnel and patients from excessive exposure. Learning Outcomes: The student will describe the biophysical mechanisms of radiation damage and the somatic and genetic effects of radiation exposure on humans; state typical dose ranges for routine radiographic procedures; explain basic methods and instruments for radiation monitoring, detection and measurement; and apply appropriate radiation protection practices. (WECM = RADR 2213)

2114. Clinical I 4 semester hours

Prerequisites: RADS 1423 and 2233.

A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Learning Outcomes: As outlined in the learning plan, the student will apply the theory, concepts, and skills involving specialized materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the particular occupation and business/industry; demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, while communicating in the applicable language of the occupation and the business or industry. (WECM = RADR 1460)

2123. Principles of Radiographic Imaging II 3(2-2)

Prerequisite: RADS 1313.

A continuation of the study of radiographic imaging technique formulation, image quality assurance, and the synthesis of all variables in image production. Learning Outcomes: The student will formulate techniques to optimize image quality, minimize patient exposure, and preserve equipment; apply methods of image quality assurance, and adapt technical variables to changing conditions. (WECM = RADR 2305)

2215. Clinical II 5 semester hours

Prerequisite: RADS 2114.

A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and

learning outcomes vary. Learning Outcomes: As outlined in the learning plan, the student will apply the theory, concepts, and skills involving specialized materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the particular occupation and the business/industry; demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, while communicating in the applicable language of the occupation and the business or industry. (WECM = RADR 2560)

2232. Advanced Medical Imaging 2(2-0)

Prerequisite: RADS 2123.

An introduction to the use of computers in medical imaging and a survey of specialized imaging modalities. Learning Outcomes: The student will formulate techniques to optimize image quality, minimize patient exposure, and preserve equipment; apply methods of image quality assurance; and adapt technical variables to changing conditions. (WECM = RADR 2233)

2233. Advanced Radiographic Procedures 3(3-0)

Prerequisite: RADS 1413.

An advanced course including the proper manipulation of equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of advanced anatomy and related pathology. Learning Outcomes: The student will master the manipulation of equipment; and evaluate images for proper demonstration of anatomy and pathology. (WECM = RADR 2431)

2315. Clinical III 5 semester hours

Prerequisite: RADS 2215.

A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Learning Outcomes: As outlined in the learning plan, the student will apply the theory, concepts, and skills involving specialized materials, equipment, procedures, regulation, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the particular occupation and the business/industry; demonstrate legal ethical behavior, safety practices, interpersonal and teamwork skills, while communicating in the applicable language of the occupation and the business or industry. (WECM = RADR 2561)

2332. Radiologic Technology Seminar 2(2-0)

Prerequisites: RADS 2711 and 2912.

This is a capstone course focusing on the synthesis of professional knowledge, skills, and attitudes in preparation for professional employment and lifelong learning. Learning Outcomes: The student will synthesize professional knowledge, skills, and attitudes; demonstrate entry level competencies for professional employment; and demonstrate skills for lifelong learning. (WECM = RADR 2235)

2711. Radiographic Pathology 1(1-0)

Prerequisite: RADS 2233.

An overview of the disease process and common diseases and their appearance on medical images. Learning Outcomes: The student will classify types of diseases; explain the pathogenesis of common diseases; and identify the appearance of common diseases on medical images. (WECM = RADR 2117)

2912. Special Topics 2(2-0)

Prerequisite: RADS 2233.

Topics address current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Learning Outcomes: The student will discuss the organization and structure of the modern-day radiology department; explore the impact of emerging trends on the structure of the imaging department; and participate in problem solving and critical thinking activities. (WECM = RADR 1291)

2923. Special Problems 3(3-0)

Prerequisite: Consent of department chair.

This course includes directed studies in selected topics with emphasis on interests and needs of students. May be repeated once for credit.

BSRS PROGRAM RADIOLOGIC SCIENCES COURSES**3023. Advanced Medical Imaging Science** 3(3-0)

Prerequisite: College level math.

This course includes a study of advanced physical principles of diagnostic radiology. Topics include x-ray generation, x-ray circuits, rectification, interactions, attenuation, filtration, beam restriction, and basic concepts related to digital imaging.

3203. Pathophysiology 3(3-0)

This course investigates general pathology and organ system pathology. It includes a brief review of normal structure and function, followed by more in-depth descriptions of specific pathologic processes. Students will use textbooks and Internet resources to learn the basic characteristics, etiology, pathogenesis, clinical features, diagnostic tools including medical imaging procedures, prognoses, and therapies for each of the specific pathologies. Virtual case study presentations are incorporated into this course.

3213. Advanced Clinical Practice Skills 3(3-0)

This course focuses on the current healthcare delivery environment including patient assessment, monitoring, infection control, and management. It includes working with multicultural patients, managing problem patients, and patient education. Additional topics include an overview of considerations when working in an increasingly digital imaging environment. Note: Students are required to perform specific clinical skills in this course. It is strongly recommended that students have minimal contact with patients, patient charts, and an EKG machine (12 lead preferred).

3313. Radiation Therapy 3(3-0)

This course provides an overview of the clinical practice of radiation therapy. Radiobiology, treatment modalities, basic radiotherapy physics, and malignant disease processes are discussed. Note: Students are required to observe patients as they go through treatment sessions. Students must have access to a radiation treatment facility to successfully complete this course.

3413. Cardiovascular and Interventional Procedures 3(3-0)

This course includes a survey of cardiovascular and interventional radiologic procedures with an emphasis on the anatomy demonstrated, equipment used, and the role and responsibilities of the radiographer. Included is a general discussion of the applications of a variety of imaging modalities.

3503. Research 3(3-0)

This course is an introduction to methods and techniques of research in the radiologic sciences. Topics include basic terminology of research, qualitative and quantitative methods, basic research designs, and data analysis techniques. Note: At least 9 hours of professional (RADS) courses must be completed before attempting this course.

3773. Radiobiology 3(3-0)

Theories and principles of the interactions of ionizing radiation with living systems are the focus of this course. Radiation effects on biologic organisms and factors affecting biological responses are explored and applied to daily practice. Topics include acute and long-term effects of ionizing radiation exposure. The student will explore applications in diagnostic and therapeutic settings.

3803. Introduction to Nuclear Medicine Physics 3(3-0)

This course provides an overview of nuclear medicine, with an emphasis on diagnostic radionuclide techniques within the context of medical imaging. The course will focus mainly on nuclear medicine procedures and how those procedures relate to the total context of diagnostic imaging.

3833. Bone Densitometry 3(3-0)

This course will provide the radiologic science professional with the knowledge and history of bone densitometry. This course will cover topics such as densitometry techniques, skeletal anatomy in densitometry, statistics and quality control. External and internal factors that affect bone density will also be covered. Patient issues such as risk fracture prediction, diagnosing osteoporosis, radiation exposure, and appropriate candidates for bone density studies will also be included. Note: Students are required to demonstrate specific clinical skills in this course. Students must have access to bone density equipment to successfully complete this course.

4123. Data Analysis 3(3-0)

The focus of this course is to provide an interdisciplinary data analysis course specifically for health sciences and human services majors using techniques and data structures relevant to clinical investigations. General topics include choosing correct procedures and using statistics to understand clinical data. Specific topics include, but are not limited to, basic statistics, measures of correlation and difference, hypothesis testing and bias, confidence intervals, reliability and validity, significance, power analysis, levels of evidence, sample size and distribution, assessing effects of treatment, quality improvement, relative risk and relative risk reduction, and odds ratio.

4433. Practicum 3 semester hours

Prerequisite: Consent of program advisor.

This course includes intensive clinical assignments for students within a special interest area related to radiologic sciences.

4513. Administration and Supervision of Diagnostic Imaging 3(3-0)

A study of general principles of supervision and administration of radiology departments that includes such topics as management techniques, in-service training, human relations, as well as identification of administrative and supervisory problems and solutions.

4523. PACS in Radiology 3(3-0)

This course investigates the use of picture archival and communications systems and their impact on healthcare. Topics include comparison of computer-based records to

traditional film records, PACS impact on teleradiology, as well as the acquisition of a system, medical-legal, productivity, image compression, and image storage and retrieval issues.

4623. Radiographic Quality Control 3(3-0)

This course presents basic theories and principles related to the safe utilization of diagnostic radiographic equipment in a clinical setting. Theories and principles responsible for the production of quality radiographs with minimal patient exposure and production costs are foci of the course. The student applies the theories and principles of safe radiation exposure by utilizing various strategies including projects and introductory laboratory experiments.

4633. Continuous Quality Improvement in Diagnostic Imaging 3(3-0)

This course is a study of the principles and methodologies of quality improvement. Comparison with traditional quality assurance are included as well as implementation standards to satisfy The Joint Commission (TJC). Students perform mind-set, departmental, and system evaluation, and use problem-solving techniques and tools to generate solutions to quality issues.

4643. Health Law in Medical Imaging 3(3-0)

This course is an introductory study of laws affecting medical imaging. Topics include administrative law, professional malpractice, patient rights, risk management, labor law, contract law, and ethical considerations.

4713. Medical Ultrasound 3(3-0)

A study of the physical and technical principles of medical ultrasound that includes properties of ultrasound, transducers, modes of application, cross sectional anatomy, and techniques of medical diagnostic ultrasound applications.

4723. Principles of Computed Tomography 3(3-0)

This course explores the basic physical and technical principles of CT scanning. Computer technology, system components, image characteristics and quality control methods are introduced. Access to a CT scanner or instructor consent required.

4733. Sectional Anatomy 3(3-0)

This course is a study of human anatomy as viewed in sectional planes. Students will compare planar anatomy to sectional anatomy and recognize anatomical structures as seen in computed tomography and magnetic resonance imaging. Studies will include the cranium, brain, chest, abdomen, spine, pelvis, and extremities.

4743. Magnetic Resonance Imaging 3(3-0)

This course explores the basic physical and technical principles of MRI scanning. Related clinical applications, system components, image characteristics, quality control methods, limitations, and future developments are introduced.

4753. Mammography 3(3-0)

This course provides the technologist with guidelines for performing quality mammography examinations. Content includes the historical background of breast cancer and technical evolution of mammography, essentials of the "Imaging Chain," patient education, and introduction to quality assurance, troubleshooting, instrumentation and positioning.

4763. Mammographic Quality Practice 3(3-0)

This course introduces the student to the regulations established under the

Mammography Quality Standards Acts of 1992 (MQSA), fully implemented in 1999. MQSA principles and quality control procedures are the main focus.

4773. Magnetic Resonance Imaging Applications 3(3-0)

This course provides a functional understanding of the basic MRI parameters and how they are used to image specific parts of the body in the axial, coronal, and sagittal planes. The will focus on MR sequences and presentation of anatomy and pathology.

4783. Computed Tomography Applications 3(3-0)

Prerequisite: RADS 4723.

This course focuses on using computed tomography as an imaging tool from the technologist's perspective. Topics include a review of patient, contrast media and adverse reactions, and imaging protocols for the head, neck, chest, abdomen, pelvis, and spine. CT-guided interventional techniques will also be discussed. Access to a CT scanner or instructor consent required.

4813. Teaching Strategies in Radiologic Sciences 3(3-0)

This course enhances skills in teaching radiologic sciences by providing instruction in curriculum development, methods of instruction, and psychology of learning. Students learn how to develop performance objectives, organize a lesson plan, and effectively present a lesson.

4823. Student Teaching 3 semester hours

This course includes teaching activities under the supervision of an experienced educator in an accredited program of radiologic sciences.

4833. Evaluation Methods in Radiologic Sciences 3(3-0)

This course provides instruction in testing and measurement, analysis of test results, and program evaluation based on accreditation standards.

4903. Selected Topics 3(3-0)

This course includes directed projects and intensive study of selected topics in radiologic sciences. May be repeated once for credit.

4913. Applied Research 3(3-0)

Prerequisite: RADS 3503.

This is a capstone course involving directed research culminating in a substantive paper based on the interest and needs of the student. Note: A minimum of 18 hours of upper division professional (RADS) courses must be completed before attempting this course.

4923. Internship 3 semester hours

Prerequisites: 12 hours of advanced level radiologic science courses or consent of instructor.

This course enables students to gain experience in promotion of the radiologic sciences profession to staff technologists as well as to the general public. Projects may include recruitment, public speaking, and presentation techniques.

RESPIRATORY CARE

Annette O. Medford, Chair (J.S. Bridwell Hall 301C)
Tammy Kurszewski, Clinical Chair (J.S. Bridwell Hall 301D)
Assistant Professors: Gresham, Helton, Kurszewski, Medford

The Respiratory Care Department offers a curriculum leading to a Bachelor of Science in Respiratory Care degree. Following completion of the BSRC program, graduates are eligible to sit for the credentialing examination for the Registered Respiratory Therapist (RRT). Registered Respiratory Therapists (RRT) may be admitted to the program through advanced standing as defined in the policy set up by the department. The BSRC program is accredited by the Commission on Accreditation for Respiratory Care. The program consists of 125 semester hours + 2 physical activities* (68 semester hours in respiratory care and 57 non-respiratory care semester hours).

ADMISSION INTO THE RESPIRATORY CARE MAJOR (BSRC)

Admission in this policy refers to a formal evaluation of program prerequisites and other course work so that those students who gain formal admission can advance to the junior and senior level respiratory care courses. This policy should not be confused with freshman and sophomore students who are respiratory care majors. Being a respiratory care major does not imply or guarantee program admission. Three admission categories exist: full, conditional, and denied. Full program admission is granted to applicants who have completed all program prerequisites, required academic foundation courses and are in good academic standing. Conditional program admission is granted to applicants who have not completed, but are presently enrolled in, course work that will complete the prerequisites and required academic foundation courses. Once a conditionally admitted student successfully completes the required course work the admission status is automatically upgraded to full admission. A student who is conditionally admitted but does not successfully complete the prerequisites, will lose conditional status. Due to limited availability of clinical sites, qualified applicants will be accepted only until the class is full. The following rules apply to admission to the Respiratory Care Program:

1. Be admitted to the University.
2. Apply to the Respiratory Care Program; applications can be obtained online. Applications will be accepted between January 2 and April 15 for entrance into the program the following summer II semester.
3. Submit a copy of the results of either the Nursing Entrance Test (NET) or the Health Occupations Basic Entrance Test (HOBET).
4. All program prerequisites must be completed before taking any respiratory care classes. The program prerequisites are Anatomy and Physiology I and II, Chemistry, college-level math, Microbiology, Rhetoric and Composition I and II, computer applications, speech communication, and general psychology or sociology. A minimum grade of C is required for all program prerequisites.
5. The required academic foundation courses are humanities (6 hours), economics, American Government (6 hours), U.S. History to 1865, U.S. History since 1865, fine arts, and two exercise physiology activity courses* (see specific descriptions).
6. Notification of admission is made in writing and requires an acceptance form returned to the Respiratory Care Department. Return of a signed acceptance form signifies that the student agrees to all technical standards outlined in the admission packet.

7. Students will complete all BSRC degree requirements 22 months from beginning respiratory care course work. With the degree requirements completed in May the students are in the best position to be successful when they sit for the registry examination following graduation.

TIME LIMITATIONS

BSRC degree students must complete all respiratory courses within a 3-year period of time beginning with the initial enrollment into Foundations of Patient Care.

PROGRESSION POLICY FOR BSRC DEGREE

Students must maintain satisfactory standards in classroom and clinical activities to be retained and to progress in the program. Requirements are as follows:

1. A minimum grade of C is required for all the following courses:

BIOL 1134, 1234, 2144	CHEM – 3 semester hours
PSYC 1103 or SOCL 1133	MATH – 3 semester hours college-level
ENGL 1113, 1123	Computer literacy – 3 semester hours**
SPCH 1133, 1233, or 2423	

Failure to attain a minimum grade of C in each of these courses will prevent the student from being formally admitted to Respiratory Care. All of the above courses must be completed before starting the respiratory care curriculum.
2. A minimum grade of 75 (C) is required in all respiratory courses. Failure to attain a minimum grade of C in these courses will prevent the student from progressing in the program. A student who fails to achieve a grade of C in any respiratory care course may repeat the course one time. Any student who fails to achieve a grade of C in any two respiratory care courses will be dismissed and not be eligible for re-admission.
3. A student who withdraws from respiratory care courses and/or the University, must go through the respiratory care admission process again.
4. A student on university academic probation may not enter or progress in the program.
5. Failure to achieve a minimum grade of C when repeating a respiratory care course will result in dismissal from the program and the student may not reapply to this respiratory care program.
6. The BSRC Program's Admission Committee reserves the right to make exceptions to the above due to extenuating circumstances.
7. Respiratory care courses must be taken in the sequence prescribed.

ACADEMIC FOUNDATIONS AND CORE CURRICULUM FOR THE BSRC DEGREE:

BIOL 1134, 1234, 2144	HUMANITIES – 6 semester hours
CHEM – 3 semester hours	SPCH 1133 or 1233
PSYC 1103 or SOCL 1133	ECON 1333
EXPH – 2 physical activities*	HIST 1133, 1233
MATH – 3 semester hours college-level	POLS 1333, 1433
ENGL 1113, 1123	FINE ARTS – 3 semester hours

GENERAL DEGREE REQUIREMENTS: Demonstrate computer literacy by taking a proficiency test or earning credit for **CMPS 1013, 1023, 1033, 1044, EDUC 1023, or MIS 2003.

MAJOR (68 semester hours)

RESP 3403, 3413, 3423, 3433, 3443, 3512, 3523, 3543, 3552, 3553, 3561, 3563, 3712, 3722, 4102, 4123, 4223, 4403, 4422, 4423, 4432, 4433, 4443, 4453, 4711, 4722, 4732.

Registered Respiratory Therapist-to-BSRC Program

This program refers to transfer of previously obtained training in Respiratory Care into the MSU Respiratory Care program. This policy specifically applies to individuals who possess the RRT credential and who wish to pursue the BSRC degree at MSU. The student will submit an official transcript to the University that documents the completion of the Registry level program. The department may grant the holder of the RRT credential 43 semester hours toward the 68 required Respiratory Care semester hours. This block transfer of credit will be granted once the student has successfully completed 9 semester hours of MSU Respiratory Care course work.

- A minimum of 30 hours must be advanced level.
- A minimum of 32 hours must be taken from MSU to satisfy the residency requirement.
- Meet the University Writing Proficiency Requirement.
- *RRT to BSRC students are under the special academic core and are not required to take the exercise physiology activities courses.

The RRT-BSRC student may choose any combination of the following courses:

RESP 3423	RESP 3433	RESP 3523	RESP 3543
RESP 3552	RESP 3553	RESP 3563	RESP 4102
RESP 4123	RESP 4223	RESP 4233	RESP 4243
RESP 4403	RESP 4422	RESP 4423	RESP 4432
RESP 4433	RESP 4443	RESP 4453	RESP 4652
RESP 4653	RESP 4803		

COURSES IN RESPIRATORY CARE (RESP)**3403. Foundations of Patient Care 3(3-0)**

This lecture course introduces basic principles of patient care to the respiratory care student. Many of these principles apply to other health care disciplines. Topics include health care systems, patient and health provider safety, medical records, charting, ethical and legal implications, and components of a patient history and physical examination.

3413. Introduction to Respiratory Care 3(2-2)

Combined lecture and laboratory course focusing on basic procedures and techniques used by respiratory care practitioners. Emphasis is placed on correct set-up and application of the procedure and equipment. Topics include infection control, patient positioning, vital signs, breath sounds, chest assessment, oxygen therapy, aerosol drug delivery, and an introduction to pharmacology.

3423. Physics and Respiratory Care 3(3-0)

This course focuses on applying basic principles of physics to the respiratory and cardiovascular systems. Emphasis is placed on the physics of fluids and gases. Topics include force, work, pressure, Bernoulli's theorem, Venturi tubes, flow patterns, viscosity, gas

laws, diffusion, surface tension, gas solubility, and the equation of motion applied to the respiratory system.

3433. Cardiopulmonary Anatomy and Physiology 3(3-0)

This lecture course focuses on applied physiology of the respiratory and cardiovascular systems. Emphasis is placed on normal structure and function. Topics include mechanics of spontaneous breathing, pulmonary circulation, gas conduction and exchange, gas transport, cardiac output and its control, reninangiotensin-aldosterone system, basic ECG analysis, the cardiac cycle, and acid-base balance.

3443. Basic Respiratory Therapeutics 3(3-0)

Prerequisites: RESP 3403, 3413.

This lecture course focuses on the theoretical application of the basic therapeutic techniques used by respiratory care professionals. Topics include airway care, gas therapy, humidity and aerosol therapy, lung expansion therapy, chest physical therapy, and patterns of cardiopulmonary dysfunction.

3512. Therapeutic Procedures and Equipment 2(1-2)

Prerequisites: RESP 3403, 3413.

Combined lecture and laboratory class focusing on secretion removal, hyperinflation and an introduction to ventilatory support. Emphasis is placed on correct set-up and application of equipment and procedures. Topics include humidity and aerosol therapy, cough techniques, incentive spirometry, bedside pulmonary function testing, percussion and postural drainage, IPPB, manual resuscitation, arterial punctures, and venous access.

3523. Respiratory Pharmacology 3(3-0)

Prerequisites: RESP 3423, 3433.

This lecture course focuses on a comprehensive review of the major medications used to promote bronchodilation and pulmonary hygiene, control airway inflammation, affect skeletal muscle tone and central nervous system activity, and support the failing cardiovascular system.

3543. Adult Critical Care 3(3-0)

Prerequisites: RESP 3423, 3433, 3443, 3512.

This lecture course focuses on a thorough review of ventilatory support techniques. Emphasis is placed on adult applications; however, some neonatal and pediatric support techniques are covered. Topics include etiology of respiratory failure, physical implications of positive pressure ventilation, methods of providing support, prescribing machine settings and managing the patient-ventilator system, hemodynamic and gas exchange monitoring, weaning techniques, and non-invasive applications.

3552. Adult Critical Care Procedures and Equipment 2(1-2)

Prerequisites: RESP 3423, 3433, 3443, 3512.

Combined lecture and laboratory course focusing on techniques and procedures used to support the adult patient in respiratory failure. Emphasis is placed on correct set-up and application of procedures and equipment. Topics include intubation and airway care, full and partial ventilatory support modes, patient-ventilator system checks, triggering, flow patterns, expired gas monitoring, and diagnostic and monitoring uses of the ECG.

3553. Neonatal and Pediatric Respiratory Care 3(3-0)

Prerequisites: RESP 3423, 3433, 3443, 3512.

This lecture course focuses on the theoretical application of respiratory care to the

pediatric and newborn patient. Topics include development of the pulmonary and cardiovascular systems, patient assessment, intrinsic lung diseases, congenital heart diseases, SIDS and apnea, applied pharmacotherapy, surfactant replacement therapy, and ventilatory support techniques.

3561. Neonatal Procedures and Equipment 1(0-2)

Prerequisites: RESP 3423, 3433, 3443, 3512.

Laboratory course focusing on techniques and procedures used to support the neonatal patient in respiratory failure. Emphasis is placed on correct set-up and application of the procedure and equipment. Topics include nasal CPAP, continuous flow IMV, neonatal intubation and airway care, ventilatory support, PEEP, inspiratory time and mean airway pressure therapy, vital signs, chest assessment, apgar scoring, and resuscitation of the newborn.

3563. Respiratory Pathophysiology (formerly 4463) 3(3-0)

Prerequisites: RESP 3523, 3543.

This lecture course reviews the etiology, pathology, pathophysiology, clinical features, and treatments for common pulmonary diseases. Disease topics include asthma, bronchitis, emphysema, cystic fibrosis, shock, pulmonary embolism, heart failure, smoke inhalation and burns, ARDS, chest trauma, atelectasis, neuromuscular disease, and pneumonia.

3712. Clinical Practicum I 2 semester hours

Prerequisites: RESP 3403, 3413.

All clinical courses require the student to integrate theory and laboratory training in the patient care setting. The focus of this clinical course is application of basic therapeutic techniques and procedures. Topics include medical records, charting, patient history and physical examination, infection control, patient positioning, vital signs, breath sounds, chest assessment, oxygen therapy, humidity and aerosol therapy, cough techniques, incentive spirometry, and percussion and postural drainage.

3722. Clinical Practicum II 2 semester hours

Prerequisites: RESP 3443, 3512, 3712.

All clinical courses require the student to integrate theory and laboratory training in the patient care setting. The focus of this clinical course is IPPB, manual resuscitation, arterial punctures and venous access, basic pulmonary function testing, pediatric respiratory care, and an introduction to adult critical care.

4102. Clinical Patient Management 2(2-0)

Prerequisite: RESP 3563.

This lecture course trains the student in the benefits and use of therapist-driven protocols. Topics include assessment skills and processing, SOAP charting, need for follow-up or reassessment, commonly used treatment protocols and diseases frequently treated with protocols. A case management format is used to simulate the clinical environment.

4123. Data Analysis 3(3-0)

Prerequisite: Senior respiratory care student.

The focus of this course is to provide an interdisciplinary data analysis course specifically for health sciences and human services majors using techniques and data structures relevant to clinical investigations. General topics include choosing correct procedures and using statistics to understand clinical data. Specific topics include, but are not limited to, basic statistics, measures of correlation and difference, hypothesis testing and bias, confidence intervals, reliability and validity, significance, power analysis, levels of evidence,

sample size and distribution, assessing effects of treatment, quality improvement, relative risk and relative risk reduction, and odds ratio.

4223. Education Theory and Practice 3(3-0)

Prerequisite: Senior respiratory care student.

This lecture course trains the student in the basic processes of education. Emphasis is placed on classroom as well as a clinical instruction. Topics include learning styles, developing objectives, teaching methods, questioning and problem solving strategies, characteristics and roles of the clinical instructor, and use of appropriate evaluation instruments.

4233. Educational/Administrative Concepts 3(3-0)

Prerequisite: RRT to BSRC Program Admission.

Educational and managerial skills appropriate to the advancement of the respiratory therapist. Students will develop, implement, and evaluate projects. May be repeated once with varied content.

4243. Advanced Practice Applications 3(3-0)

Prerequisite: RRT to BSRC Program Admission.

Introduction to emerging areas within the profession. Students will develop skills in chosen specialization by designing, implementing, and evaluating appropriate projects. May be repeated once with different content.

4403. Pulmonary Diagnostics 3(3-0)

Prerequisites: RESP 3423, 3433.

This lecture course focuses on standard methodologies used to diagnose and monitor patients with pulmonary disease. Emphasis is placed on technical aspects as well as disease presentation. Topics include measurement and analysis of lung volumes, ventilation, pulmonary mechanics, gas distribution, diffusion testing, exercise testing, quality assurance, and blood gas analysis.

4422. Rehabilitation and Health Promotion 2(2-0)

Prerequisite: Senior respiratory care student.

This lecture course educates the respiratory care student in the principles and practices used in pulmonary rehabilitation programs. Topics include organization and management, candidate assessment and selection, patient and family education, smoking intervention techniques, role of home and alternate care sites, and reimbursement for services.

4423. Research and Respiratory Care 3(3-0)

Prerequisite: Senior respiratory care student.

This lecture course instructs the respiratory care student in the role research plays in the practice of respiratory care. Quality improvement is used to emphasize the basic components of research. Topics include problem development, literature review, data analysis techniques and interpretation, institutional review boards, and communicating the results.

4432. Theoretical Applications 2(2-0)

Prerequisite: Senior respiratory care student.

This lecture class provides the student with an assessment of his/her educational strengths and weaknesses with respect to the practice of respiratory care. Topics include an assessment of the following examinations; written registry, clinical simulations, and if time permits, pulmonary function technology. Passing the Certified Respiratory Therapist (CRT) examination and mock written registry and clinical simulation examinations are required in this class.

4433. Cardiopulmonary Dynamics 3(3-0)

Prerequisites: RESP 3543, 3552.

This lecture course provides the student with a thorough understanding of cardiac electrophysiology and clinical hemodynamics. Emphasis is placed on rhythm recognition, and causes and treatments of common dysrhythmias. Other topics include advanced cardiac life support.

4443. Management of Health Care Services 3(3-0)

Prerequisite: Senior respiratory care student.

This lecture course introduces the student to managing health care services. Emphasis is placed on development of skills in leadership, communication, time management, problem solving, motivation, and other critical competencies. Topics include methods to achieve greater productivity, policy improvement, recruitment, selection, and training of new employees, as well as current issues facing the health care system.

4453. Advanced Health Assessment 3(3-0)

Prerequisite: Senior respiratory care student.

This lecture course provides the student with advanced physical assessment skills. The assessment of the major organ systems commonly affected by or associated with pulmonary diseases are explored. Topics include detailed assessment of the chest and lungs, heart and great vessels, skin, head and neck, nose and throat, and emergency and life threatening situations.

4652. Independent Study 2 semester hours

Prerequisite: Consent of chair.

This course allows the student to pursue specific interest(s) within the field of respiratory care. Under faculty direction the student can participate in research, clinical experience, or other areas of directed study. May be repeated for credit when topics vary.

4653. Independent Study 3 semester hours

Prerequisite: Consent of chair.

This course allows the student to pursue specific interest(s) within the field of respiratory care. Under faculty direction the student can participate in research, clinical experience, or other areas of directed study. May be repeated for credit when topics vary.

4711. Clinical Practicum III 1 semester hour

Prerequisites: RESP 3553, 3561, 3722.

All clinical courses require the student to integrate theory and laboratory training in the patient care setting. This clinical course focuses on the application of therapies, techniques and procedures to the newborn patient. Topics include aerosol drug delivery, pulmonary hygiene, nasal CPAP, continuous flow IMV, neonatal intubation and airway care, ventilatory support, PEEP, inspiratory time and mean airway pressure therapy, vital signs, chest assessment, apgar scoring, and resuscitation of the newborn. Passing a mock CRT examination is required in this class.

4722. Clinical Practicum IV 2 semester hours

Prerequisite: RESP 4711.

All clinical courses require the student to integrate theory and laboratory training in the patient care setting. This clinical course focuses on the application of therapies, techniques and procedures used to support the adult patient in respiratory failure. Topics include aerosol drug delivery, pulmonary hygiene, airway mucosa care, patient-ventilator system checks, prescribing machine settings, and managing the patient-ventilator system.

4732. Clinical Practicum V

2 semester hours

Prerequisite: RESP 4722.

All clinical courses require the student to integrate theory and laboratory training in the patient care setting. This clinical course focuses on the application of therapies, techniques and procedures used to support the adult patient in respiratory failure. Topics include hemodynamic and gas exchange monitoring, weaning techniques and non-invasive applications, intubation and airway care, full and partial ventilatory support modes, cardiopulmonary resuscitation, and diagnostic and monitoring uses of the ECG.

4803. Internship in Respiratory Care

3 semester hours

Prerequisites: Clinical I, II, and III, B average in lecture and laboratory major classes and permission of the chair.

To allow respiratory care students to participate in and experience the practice of respiratory care in geographic areas other than Wichita Falls. Field sites are chosen on the basis of the continuum of care supplied, willingness to accept students, and completion of a clinical affiliation agreement. Students are responsible for making initial contact with field site, transportation, room and board, and any other costs of the field site experience.

SOCIAL WORK

Carol Bisbee, Chair (Martin Building 104-A)

Professor: Fashimpar

Assistant Professor: Bisbee

Professor Emeritus: Walker

MISSION STATEMENT FOR THE SOCIAL WORK PROGRAM

In agreement with the mission of Midwestern State University and the mission of the College of Health Sciences and Human Services, the Social Work Program strives to prepare students to be generalist social work practitioners who serve as ethical social workers and leaders in the community in a wide variety of settings. The program is dedicated to educating students to practice without discrimination and to advocate for diverse populations, oppressed populations, or economically disadvantaged populations through leadership activities, research, service, and a commitment to professional growth.

A Bachelor of Social Work degree (BSW) prepares a student for entry level practice as a generalist practitioner. The Social Work Program at MSU offers (1) a broad liberal arts foundation; (2) grounding in knowledge from the behavioral and social sciences concerning the characteristics and behavior of individuals, families, groups, organizations, and communities; (3) the opportunity to integrate and apply the components of social work education in a rigorous field practicum; and (4) content and experiences relative to values and ethics as applied to special populations and self. Generalist practice uses an ecological approach to integrate both treatment and growth through conceptualizing transactions between people and their physical and psychosocial systems in the environment. The program supports individual and social change predicated on a humanitarian and social justice philosophy.

The Social Work Program is accredited by the Council on Social Work Education at the baccalaureate level. There is no minor offered with the BSW degree and no social work credit is awarded for life experience. Graduates from the program are prepared for graduate study in

social work or other disciplines where the baccalaureate degree would be appropriate preparation. BSW graduates are eligible to take the Texas State Board of Social Work Examiners test for Licensed Social Worker (LBSW).

Admission to the Social Work Program:

Students must have completed 24 semester hours before applying for admission to the Social Work Program. This total includes the following courses: ENGL 1113 and 1123; PSYC 1103; SOCL 1133; HIST 1133 and 1233; and POLS 1333 and 1433.

Students desiring to major in social work should complete the Social Work Application for Admission form during the semester they take Introduction to Social Work. Other students (transfers, etc.) should complete this form immediately upon admission to the University. The Social Work Admissions Committee reviews the application and notifies students by letter about acceptance or non-acceptance to the program. A personal interview with a social work faculty member to discuss educational needs and expectations of the Social Work Program should be scheduled as soon as possible after completion of the form. In addition to general undergraduate requirements, students must maintain at least a 2.0 GPA and demonstrate suitability for professional social work practice with knowledge and adherence to the NASW Code of Ethics.

General (see page 89)

Academic Foundations and Core Curriculum (54 hours) (see page 91)

Major (44 hours)

SOWK 2423, 2544, 2554, 3533, 3643, 3833, 3943, 3953, 4213, 4236, and 4246.
SOWK 4123 or NURS 4123.

For all social work majors, additional program requirements, as listed below, must be completed.

- A. Specific requirements in Academic Foundations Core.
 - SOCL 1133. Can be used to satisfy part of social environment requirement in Academic Foundations Core.
 - ECON 2333. Satisfies the Academic Foundations Core requirement in economics.
 - Two semesters in one foreign language (Spanish preferred). Satisfies the humanities part of Academic Foundations Core.
 - BIOL 1134. Satisfies part of the science requirement in Academic Foundations Core.
- B. Additional required support courses. (21 hours)
 - PSYC 1103, 3603 or SOWK 4313, and ENGL 3203 or 3523
 - Four (4) courses chosen from the following:
 - SOWK 3453, 4113, 4223, 4233, 4323, 4343, 4413, 4423, or
 - SOWK 4313 if not taken in place of PSYC 3603 above.
- C. Three (3) hours of additional electives

COURSES IN SOCIAL WORK (SOWK)

*** Only social work students may take courses marked with an asterisk.**

2423. Introduction to Social Work (TCCNS = SOCW 2361) 3(3-0)

This course is an introduction to the social work profession and is designed to assist students in clarifying and selecting social work as a major. It is required for all (but not limited to) social work majors and provides an overview of the profession's history, philosophy, values, ethics, knowledge base, skills, and areas of service. Generalist and social systems perspectives are emphasized as conceptual frameworks for practice. In addition, the course considers the institution of social welfare in contemporary American society, emphasizes human diversity, and discusses policy and practice relevant to special populations. A 20-hour volunteer placement in a social service agency is required.

3233. Parenting: Family and Community 3(3-0)

Theories regarding raising mentally healthy children within a family environment. Policies and laws related to child abuse and neglect and foster care and adoptions. For B.A.A.S. majors only in distance education.

3453. Child Welfare Policy and Practice (formerly 2853) 3(3-0)

This course addresses the needs and problems (including abuse and neglect) of children and their families and considers possible solutions to these problems. Policies and practice issues are explored as they pertain to child welfare in diverse populations. The course is intended for students from a variety of disciplines.

***3533. Practice I** 3(3-0)

Prerequisite: SOWK 2423 or concurrent enrollment.

This course examines the theoretical base for generalist social work practice, the structure of the social work process, and the skills of assessment and intervention with emphasis on social work with individuals and families. Content includes women and minorities as well as ethnocultural factors.

***3544. Human Behavior and the Social Environment I** 4 semester hours
(formerly 2544)

Prerequisite: SOWK 2423 or concurrently with advisor's consent.

This course is a study of child development, beginning before conception and ending with early adolescence. Theories are presented on physical development, cognitive and social development, and emotional development. The many influences on child development within the context of family and their environment include the effects of diversity, oppression, discrimination, social and economic injustice, and spirituality. A 40-hour practicum is required, 10-hours each in four different agencies.

***3554. Human Behavior and the Social Environment II** 4 semester hours
(formerly 2554)

Prerequisite: SOWK 3544.

This course focuses on the life-span from adolescence through death. It builds on the knowledge of the life cycle from conception through adolescence, the basic understanding of terminology and processes regarding the social and psychological nature of humans, and on the understanding of social work values learned in Human Behavior and the Social Environment I. It provides a framework for understanding the individual, group, organizational, institutional, and cultural contexts which influence human behavior. A 40-hour practicum is required, 10-hours each in four different agencies.

- *3643. Social Work Research** 3(3-0)
 Prerequisites: 6 hours of social work, and SOWK 3313 or NURS 4123.
 This course familiarizes the student with basic terminology of research, basic research design, and for evaluating practice and social programs through qualitative and quantitative methods. It is also teaches the student to read and analyze research reports, to relate research to issues in professional practice, to gain experience in performing both cognitive and practical tasks in research, and to increase awareness of potential biases in research, particularly in issues involving women and minorities.
- *3833. Practice II** 3(3-0)
 Prerequisite: SOWK 3533 or concurrent enrollment.
 This course gives students an understanding of group processes and improves their skills as group members and leaders. The course provides an integration of group theory, research, and applied methods into the generalist practice model.
- *3943. Social Welfare Policy** 3(3-0)
 This course introduces substantive issues of social welfare policy in the United States. It presents an historical overview of major policies as responses to social problems, and it explores the role of social work in policy development, implementation, and analysis. Emphasis is placed upon the ways in which policy informs practice at micro, mezzo, and macro systemic levels and upon the importance of policy in work with special populations.
- *3953. Human Diversity** 3(3-0)
 This course provides content about differences and similarities in the experiences, needs, and beliefs of people. It provides theoretical content regarding differential assessment and intervention skills which will enable practitioners to serve diverse populations including minorities, multicultural, race, and ethnic groups, as well as socially and economically oppressed groups and populations-at-risk.
- 4113. Aging** 3(3-0)
 This course promotes understanding of the aging process as a normal, human, and social fact of life. This course will examine stereotypes and images that modern society often has of older people. These stereotypes and images will be studied in the context of demographics and basic information concerning aging. We will examine the issues that older people face and society's response to these issues.
- 4123. Data Analysis (formerly 3313)** 3(3-0)
 Prerequisite: MATH 1003 or equivalent.
 The focus of this course is to provide an interdisciplinary data analysis course specifically for health sciences and human services majors using techniques and data structures relevant to clinical investigations. General topics include choosing correct procedures and using statistics to understand clinical data. Specific topics include, but are not limited to, basic statistics, measures of correlation and difference, hypothesis testing and bias, confidence intervals, reliability and validity, significance, power analysis, levels of evidence, sample size and distribution, assessing effects of treatment, quality improvement, relative risk and relative risk reduction, and odds ratio.
- *4201, 4202, 4203. Independent Study** 1-3 semester hours
 Prerequisites: 9 hours of social work.
 Intensive study for the advanced student within a special area in the field of social work.

***4213. Practice III** 3(3-0)

Co-requisite: Must have concurrent enrollment in SOWK 4236.

This course gives social work majors the opportunity to learn basic theory and techniques related to social work practice in macrosystems. Specifically, the focus will be on theory and techniques related to administration, planning, evaluation, and community organization.

4223. Family Systems 3(3-0)

This course focuses on the family life cycle and family development. Different theories regarding improvement of family functioning are covered such as structural problem solving and communication. Solution-focused Bowens intergenerational systems theory.

4233. Parenting 3(3-0)

Students will learn to assess parenting skills using standardized tests, interviews and observations. The major theories regarding how to rear a mentally healthy and socially skilled child will be taught. These will include behavioral, Adlerian and psychoanalytic. Attention will be given to the skilled social worker's needs in order to manage certain family/parenting problems such as anger, family violence, chemical abuse, Attention Deficit Hyperactivity disorder, divorced and blended family parenting.

***4236. Field Practicum and Seminar I** 6 semester hours

Prerequisites: SOWK 3533 and 3833, senior standing, and consent of instructor.

Integration of theory into generalist practice through placement in community social service agencies for at least 200 hours. Micro practice experience will be emphasized in this placement. Course includes a weekly seminar. Students must secure liability insurance for all field work practicums.

***4246. Field Practicum and Seminar II** 6 semester hours

Prerequisites: Successful completion of Field Practicum and Seminar I and SOWK 4213.

Continuation of Field Practicum I. 200 hours per semester plus weekly seminar. Macro experiences will be included in Field II placement to enlarge the generalist practice experiences acquired in SOWK 4236.

4313. Community Mental Health 3(3-0)

This course utilizes the social work generalist practice approach to mental health services in communities. There is a strong emphasis on client empowerment and reducing the stigma of mental illness in our society. This is accomplished by examining society's response to mental illness and by examining the impact of this response on people that are affected by mental illness, including special populations and families. (May be taken in place of PSYC 3603).

4323. Introduction to Substance Abuse 3(3-0)

This course will present an overall perspective on alcohol and drugs to include use, historical background, and current knowledge. The course will cover licit and illicit drugs, over-the-counter drugs, treatment, and legal issues associated with these drugs.

4343. Treatment Modalities in Substance Abuse 3(3-0)

This course will address self-help as well as other treatment modalities including inpatient and outpatient treatment. It will also give instruction on the use of community resources as adjuncts to treatment.

4363. Family Systems and Substance Abuse 3(3-0)

This course will present the different perspectives on the families and significant others

of substance abusers. It will also include ethnocultural factors as well as women's issues. For B.A.A.S. majors only in distance education.

4413. Social Work in Human Resources 3(3-0)

This course addresses the role of social work, employee assistance, and human counselors in the workplace. The ways in which organizations assist troubled employees will be the major focus of the course. Organizational efforts to help troubled employees with family, mental health, alcohol, drug, financial, or other personal problems will be examined as to their effects on employee functioning and productivity. Laws affecting the civil rights of workers, including the Americans with Disabilities Act, the Rehabilitation Act, and Equal Employment Opportunity are covered.

4423. Selected Topics in Social Work 3(3-0)

Intensive study and coverage of selected topics in social work. May be repeated for credit when topics vary.



PROTHRO-YEAGER COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

Samuel E. Watson, III, Dean (O'Donohoe Hall 121)

MISSION STATEMENT FOR THE PROTHRO-YEAGER COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

The purpose of the Prothro-Yeager College of Humanities and Social Sciences is threefold. First, the college provides for students throughout the university a broadly based liberal arts curriculum designed to empower them with the fundamental language and communication skills as well as the critical thinking skills necessary for a lifetime of learning and achievement. Secondly, the college offers general education courses in the modern languages, literature, history, philosophy, humanities, political science, sociology, and psychology, which provide a foundation of knowledge necessary in the development of those cultural and aesthetic values that enrich the individual and are essential for a meaningful and productive life. Lastly, the college affords preparation for careers in teaching and a wide range of further graduate and professional studies in such fields as English, history, political science, psychology, the law, the ministry, library science, and museum management.

The Prothro-Yeager College of Humanities and Social Sciences offers majors, minors, programs, and courses in Applied Arts and Sciences, English, Foreign Languages, History, Humanities, International Studies, Philosophy, Political Science, Psychology, Social Studies, and Sociology.

BACHELOR OF APPLIED ARTS AND SCIENCES

Pamela Morgan, Associate Vice President for Outreach and Engagement
(Bea Wood Hall 122)

pamela.morgan@mwsu.edu

Delores Jackson, Assistant Director (Bea Wood Hall 115)

delores.jackson@mwsu.edu

(940) 397-4400 / FAX (940) 397-4918

<http://libarts.mwsu.edu/baas>

MISSION STATEMENT

The Bachelor of Applied Arts and Sciences (B.A.A.S.) degree is designed to offer students with workforce education, vocational-technical training and/or professional experience in occupational fields the opportunity to obtain a baccalaureate degree. Such experienced professional/vocational students may obtain credit toward this degree via regionally accredited college-level course work and/or certain types of professional and educational training. Students who pursue the degree are required to complete the academic core requirements, thirty-six hours of advanced credit that is complementary to the vocational-technical or professional area, and any additional hours necessary to meet the 122-hour university requirement as stated in the catalog.

ADMISSION TO PROGRAM

Before a student can be admitted, the student must arrange an interview with the Director or Assistant Director of the B.A.A.S. Program.

B.A.A.S. students are limited to not more than twenty-five percent of their total semester credit hours in courses transferable to a program in a school of business and not more than fifteen semester credit hours in business school courses completed at Midwestern State University. However, students may select a minor in Business Administration with the approval of the Dean of the Dillard College of Business Administration.

Students currently enrolled at Midwestern State University in a designated degree program who satisfy the intent of the mission statement and have at least a 2.75 g.p.a. will be allowed to transfer to the B.A.A.S. degree program. Exceptions to this policy will be considered on an individual basis by the B.A.A.S. Advisory Committee. In such cases, the student must submit to the committee an application accompanied by a letter of recommendation from an advisor in the student's current major.

DEGREE REQUIREMENTS

All transfers from another MSU program must complete at least 12 hours under the B.A.A.S. program to be eligible to graduate from the B.A.A.S. program.

The student must complete a baccalaureate degree plan from residence and transfer credit hours by meeting the requirements as follows:

Option A: The Traditional B.A.A.S. Program

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

Occupational Specialty (24-36 semester hours)

Credits toward an area of coherent specialization may be earned from community colleges, this university and other senior institutions, workforce education, vocational or technical schools, armed forces schools, work experiences, and non-traditional learning experiences that can be equated to college credit. To qualify for work experience credit, a student must have 3 consecutive years of full-time employment within the last 6 years. A student may be awarded 2 hours of credit for each qualifying year of job experience related to the student's occupational specialty up to a maximum of 6 hours. Credit for non-traditional experiences is granted on the basis of evaluation by the Director and the B.A.A.S. staff utilizing the National Guide of the American Council on Education (A.C.E.) and other appropriate publications. Documentation will be placed in the student's permanent file in the Office of the Registrar. A minimum of 24 semester hours in the area of occupational specialty must be completed before the student can be accepted into the program. Cognate vocational-technical courses may be accepted within the area of occupational specialty or professional development.

Professional Development (36 advanced semester hours that may include 3 hours of B.A.A.S. 3113 Internship and will include 3 hours of B.A.A.S. 4113 Capstone Project).

The courses taken in this area will be chosen on the basis that they will give academic depth or breadth to the area of specialization or will provide substantive developmental knowledge for the student's career or personal goals.

Option B: The B.A.A.S. Program with Criminal Justice Emphasis

The Criminal Justice emphasis provides students the background to pursue employment options in the criminal justice career field. The combination of such courses as law enforcement, political science, psychology, sociology, and social work prepares those already working in the field for career advancement. For those wishing to enter a criminal justice field, the degree offers the graduate the possibility of employment in such career fields as federal, state, and local law enforcement, institutional and community-based corrections, and criminal investigations.

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

Occupational Specialty (24-36 semester hours)

Credits toward an area of coherent specialization may be earned from community colleges, this university and other senior institutions, workforce education, vocational or technical schools, armed forces schools, work experiences, and non-traditional learning experiences that can be equated to college credit. To qualify for work experience credit, a student must have 3 consecutive years of full-time employment within the last 6 years. A student may be awarded 2 hours of credit for each qualifying year of job experience related to the student's occupational specialty up to a maximum of 6 hours. Credit for non-traditional experiences is granted on the basis of evaluation by the Director and the B.A.A.S. staff utilizing the National Guide of the American Council on Education (A.C.E.) and other appropriate publications. Documentation will be placed in the student's permanent file in the Office of the Registrar. A minimum of 24 semester hours in the area of occupational specialty must be completed before the student can be accepted into the program. Cognate vocational-technical courses may be accepted within the area of occupational specialty or professional development.

Professional Development (36 advanced semester hours that may include 3 hours of B.A.A.S. 3113 Internship and will include 3 hours of B.A.A.S. 4113 Capstone Project).

The B.A.A.S. Criminal Justice Option consists of 36 semester hours which must be chosen from the following courses:

BAAS 3113

BAAS 4113

CRJU 3103, 3113, 3123, 3133, CRJU/POLS 3213, CRJU 3223, 3313, 3323, 3463, 3713, 3723, CRJU/SOCL 3733, CRJU 3913, 3923, 4123, CRJU 4213, 4223, CRJU/POLS 4233, CRJU 4253, 4263, 4273, 4283, 4333, 4403, 4413, 4923

ENGL 3203

MCOM 4683

PHIL 3533

POLS 3233, 3443, 3933, 4043, 4133, 4163, 4173, 4243, 4653, 4953

PSYC 3913

SOCL 3333, 3353, 3433, 4633

SOWK 3953, 4233, 4323, 4363

SPCH 3023

NOTE: The B.A.A.S. Criminal Justice Option student may submit a petition to the B.A.A.S. program for permission to apply appropriate additional courses to fulfill the above 36 semester hour curriculum.

Option C: The B.A.A.S. Program with Liberal Arts Emphasis

The Liberal Arts emphasis is a gateway program that provides students with the critical thinking tools for a lifetime of learning and career achievement. The program is designed to fulfill the needs of students who wish to prepare for the challenges of today's world by acquiring the skills and tools provided by a broadly based liberal arts education. The goal of the program is to equip these students with that broad base of knowledge in the liberal arts and to provide them with the communication and language skills necessary for success in the marketplace and in life.

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

Occupational Specialty (24-36 semester hours)

Credits toward an area of coherent specialization may be earned from community colleges, this university and other senior institutions, workforce education, vocational or technical schools, armed forces schools, work experiences, and non-traditional learning experiences that can be equated to college credit. To qualify for work experience credit, a student must have 3 consecutive years of full-time employment within the last 6 years. A student may be awarded 2 hours of credit for each qualifying year of job experience related to the student's occupational specialty up to a maximum of 6 hours. Credit for non-traditional experiences is granted on the basis of evaluation by the Director and the B.A.A.S. staff utilizing the National Guide of the American Council on Education (A.C.E.) and other appropriate publications. Documentation will be placed in the student's permanent file in the Office of the Registrar. A minimum of 24 semester hours in the area of occupational specialty must be completed before the student can be accepted into the program. Cognate vocational-technical courses may be accepted within the area of occupational specialty or professional development.

Professional Development (36 advanced semester hours that may include 3 hours of B.A.A.S. 3113 Internship and will include 3 hours of B.A.A.S. 4113 Capstone Project).

The Liberal Arts Option is 36 advanced semester hours chosen from the following:

1. Two courses chosen from *any four* of the following six categories for a *total of twenty-four advanced hours*.
2. An *additional twelve advanced hours* of courses chosen from any of the six subject areas listed below.

English	Political Science
History and Geography	Psychology
Humanities/Philosophy	Sociology

NOTE: Any B.A.A.S. student may petition to apply upper division foreign language courses to the above option; approval must be obtained from the B.A.A.S. program.

COURSES IN APPLIED ARTS AND SCIENCES (BAAS)

3113. Internship in Public Administration

3(0-3)

Prerequisite: Junior standing.

Students will work in approved employment situations that can be demonstrated to be an integral learning portion of their career development education. Student performance will be reviewed by employers and by the Director of the B.A.A.S. program. Applications for the internship require the approval of the B.A.A.S. Director or an Academic Advisor. B.A.A.S.

students enrolled in the internship should keep a journal documenting the internship, noting the tasks undertaken, and assessing how those tasks are applicable to current employment and future career goals. From that journal students will write an internship report.

4113. Capstone Project 3(0-3)

Prerequisite: Senior standing.

Working with a B.A.A.S. advisor, each student will produce a capstone portfolio as the culminating activity to his/her B.A.A.S. work. The capstone course is designed to help the student assess the educational experience in relation to career goals and the application of educational concepts to those goals. Although the portfolio should be considered a “work in progress” from the student’s first enrollment in the B.A.A.S. program, the student will enroll in B.A.A.S. 4113 only once - typically when completion of all requirements can be accomplished during the enrolled semester.

ENGLISH

David Rankin, Chair (Bea Wood Hall 216)

Professors: J. Hoggard, Johnson, Rankin

Associate Professors: Fields, Hoffman,

Assistant Professors: Garrison, Giddings, Henschel, Henson, Lodge, Terry

Instructors: Button, Green

Professors Emeriti: Barnett, Carpenter, Galbraith, L. Hoggard, Olson,

Rogers, Smith, Stewart, Taylor, Whitlock

REQUIREMENTS FOR A MAJOR IN ENGLISH

The requirements for the degree of Bachelor of Arts with a major in English are as follows:

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

Bachelor of Arts (see page 93)

Program

Additional General

At least a C average in lower-level English courses

Major (30 semester hours exclusive of 1113 and 1123)

Six hours sophomore literature; three hours chosen from language courses 3513, 4513, 4523, 4753, 4763; three hours chosen from 3000 level courses; nine hours chosen from 4000 level courses; and nine hours English electives (excluding 2113)

Minor or Field of Concentration in French (see page 287) is to be selected by the student and approved by the chair of the department involved.

TEACHER CERTIFICATION IN ENGLISH

The requirements for a Bachelor of Arts degree **with Grades 8-12 Certification in English Language Arts and Reading** are found on page 147. The requirements for a Bachelor of Science in Interdisciplinary Studies **with Middle School English Language Arts and Reading (4-8) Certification** are found on page 137.

REQUIREMENTS FOR A MINOR IN ENGLISH

Eighteen semester hours, exclusive of English 1113 and 1123, including six hours of sophomore literature; three hours chosen from language courses 3513, 4513, 4523, 4753, 4763; three hours from 3000 level courses; three hours chosen from 4000 level courses; and three hours English elective (excluding 2113).

REQUIREMENTS FOR A MINOR IN ENGLISH: WRITING EMPHASIS

Eighteen semester hours, exclusive of English 1113 and 1123, including six hours of sophomore literature; three hours of either 4513 or 4523; and nine hours chosen from 3103, 3203, 3523 (3103 and 3523 may be repeated for credit).

The following list of undergraduate courses outlines the varying emphases offered by the English Department.

FRESHMAN ENGLISH

1113, 1123

SOPHOMORE LITERATURE

2413, 2423, 2613, 2623, 2723, 2813, 2823

Any of these courses can serve as a literature course in the core curriculum. See page 92.

WRITING COURSES

2113, 3103, 3203, 3213, 3523, 4203, 4213

GENERAL LITERATURE COURSES

3003, 3253, 3273, 3293, 3303, 3313, 3333, 3343, 3503, 3713, 3723, 4543

Any of the 3000-level courses above can substitute as a literature course in the core curriculum.

LANGUAGE AND LINGUISTICS COURSES

3513, 4513, 4523, 4753, 4763

THEORETICAL COURSES

4013, 4533, 4553

AMERICAN LITERATURE COURSES

4623, 4633, 4643, 4653

ENGLISH LITERATURE COURSES

4706, 4716, 4753, 4763, 4773, 4783, 4853, 4863, 4873, 4883, 4893

WORLD LITERATURE COURSES

4903, 4913, 4923, 4943, 4953

DIRECTED READING OR RESEARCH

4993

COURSES IN ENGLISH (ENGL)**1003. Introduction to College Composition**

3(3-0)

The process and practice of essay writing. Emphasis on correct word usage, spelling, punctuation, sentence structure, paragraph writing, and the whole essay.

Required of those who have failed the writing section of the Accuplacer or THEA tests, MSU Placement Test, or other approved state alternative test.

1013. Introduction to College Reading 3(3-0)

The study and practice of reading comprehension through structure, meaning, and evaluation. Analysis of sentences, paragraphs, and whole pieces of writing. Attention given to making inferences, drawing conclusions, building vocabulary.

Required of those who have failed the reading section of the Accuplacer or THEA tests, MSU Placement Test, or other approved state alternative test.

1023. Advanced Oral Skills for International Students 3(3-0)

This course is designed to assist international students in the development of fluency and accuracy in spoken English. The course provides instruction and practice in listening comprehension, pronunciation, stress, intonation, and conversation at the academic level in North American English.

1033. Advanced Grammar for International Students 3(3-0)

This course is designed to assist international students in the development of the English writing skills and fluency needed to be successful in academic subjects at the university level. The course includes a comprehensive look at sentence-level grammatical units.

1113. Rhetoric and Composition (TCCNS = ENGL 1301) 3(3-0)

Prerequisites: Demonstrated readiness for college-level reading and writing. Reading readiness can be demonstrated either by passing the reading section of the Accuplacer or THEA tests, or of an approved alternative test, or being exempt from the reading section of TSI on the basis of other examination scores. Reading readiness can also be demonstrated by earning a grade of *C* or better in ENGL 1013, Introduction to College Reading. Writing readiness can be demonstrated either by passing the writing section of the Accuplacer or THEA tests, or of an approved alternative test, or being exempt from the writing section of TSI on the basis of other examination scores. Writing readiness can also be demonstrated by earning a grade of *C* or better in ENGL 1003, Introduction to College Composition. Students who are TSI exempt by military service or associate's degree, or by the former exemptions of grandfathering or high school grade point average, may be required to demonstrate readiness by passing the reading and writing sections of the MSU Placement Test, unless other test scores and/or transfer courses provide such proof.

Training in skills involved in the writing process through the composition of short essays and the reading of prose selections. At least one essay--including all steps in the composition process--will involve instruction and practice in computer-assisted writing and editing. (A grade of *C* or better is required in this course.)

1123. Rhetoric and Composition (TCCNS = ENGL 1302) 3(3-0)

Prerequisite: English 1113 with a grade of *C* or better.

Continued training in skills involved in the writing process through composition and reading with the addition of particular skills needed for thoughtful research, including selection, analysis, integration, and documentation of both print and electronic sources. Preparation of a research paper of moderate length demonstrating these skills. (A grade of *C* or better is required in this course.)

2113. Composition Skills 3(3-0)

Prerequisites: English 1123 and completion of 60 semester hours.

Skill in clear and forceful composition and in standard usage is the primary objective of the course. The course is required of those who have failed the Writing Proficiency

Examination, see page 90. May not be counted toward an English major or minor, or toward English as a first or second teaching field or teaching emphasis.

2413. **World Literature** (TCCNS = ENGL 2332) 3(3-0)

Prerequisite: English 1123.

A study of the masterpieces of Western world literature from Homer through the Renaissance.

2423. **World Literature** (TCCNS = ENGL 2333) 3(3-0)

Prerequisite: English 1123.

A study of the masterpieces of Western world literature from the Enlightenment to the present.

2613. **Survey of American Literature** (TCCNS = ENGL 2327) 3(3-0)

Prerequisite: English 1123.

Survey of American literature with emphasis upon historical background as well as upon important writers from the beginnings through the rise of realism.

2623. **Survey of American Literature** (TCCNS = ENGL 2328) 3(3-0)

Prerequisite: English 1123.

Survey of American literature with emphasis upon historical background as well as important writers from realism to the present.

2723. **Special Topics in Literature** 3(3-0)

Prerequisite: English 1123.

Concentrated study of selected authors, genres, or themes. May be repeated for credit with changed content.

2813. **Survey of English Literature** (TCCNS = ENGL 2322) 3(3-0)

Prerequisite: English 1123.

A survey of English literature from its seventh century beginnings through the neoclassical era. Emphasis is on the works of principal authors as they reflect literary and historical backgrounds.

2823. **Survey of English Literature** (TCCNS = ENGL 2323) 3(3-0)

Prerequisite: English 1123.

A survey of English literature of the Romantic, Victorian, and Modern periods. Emphasis is on the works of principal authors as they reflect literary and historical backgrounds.

3003. **Folklore** 3(3-0)

Prerequisite: English 1123.

An examination of the development of folklore as an academic discipline and of the uses made of folklore in a variety of cultures.

3103. **Special Topics in Creative Writing** 3(3-0)

Prerequisites: Six hours of English beyond 1123 or consent of chair.

Emphasis on the writing of fiction and poetry, the techniques and concerns of each. Ordinarily only one genre is dealt with in any given semester. May be repeated for credit with consent of instructor and chair.

3203. **Technical Writing** 3(3-0)
 Prerequisite: English 1123.
 The purposes and practice of expository writing in the professions, with particular emphasis on writing related to each student's major. Topics include audience analysis, technical editing, and elements of various types of technical reports. Each student will complete one major report as well as numerous shorter letters and reports.
3213. **Digital and New Media Rhetoric** 3(3-0)
 Prerequisite: English 1123.
 For students of all disciplines who want to explore the theoretical and practical complexities of digital and new media rhetoric. Focus on the analysis of the language of new media, interactive and iterative approaches to writing, visual rhetoric (data visualization and infographics), and the cultural and ethical issues of composing in a digital age.
3253. **Dramatic Literature** 3(3-0)
 Prerequisite: English 1123.
 A survey of major dramatic works in world literature.
3273. **Poetry** 3(3-0)
 Prerequisite: English 1123.
 Reading and analysis of selected poetry.
3293. **Short Story** 3(3-0)
 Prerequisite: English 1123.
 Reading and analysis of selected short stories.
3303. **Tragedy** 3(3-0)
 Prerequisite: English 1123.
 A study of the tragic view of man in literature from the classical Greeks to the present, including philosophical background.
3313. **Comedy** 3(3-0)
 Prerequisite: English 1123.
 A study of the comic vision of man in literature from the classical Greeks to the present, including philosophical background.
3333. **Satire** 3(3-0)
 Prerequisite: English 1123.
 Theory of satire and study of its application in representative literary works.
3343. **The Novel** 3(3-0)
 Prerequisite: English 1123.
 Reading and analysis of selected novels.
3503. **Advanced Survey of Literature** 3(3-0)
 Prerequisites: Six hours of English beyond 1123 or consent of chair.
 Instruction and practice in the written analysis of representative works from Western civilization with an emphasis on the major genres, especially poetry.
3513. **Advanced Grammar** 3(3-0)
 Prerequisites: Six hours of English beyond 1123 or consent of chair.
 Discussion and practice of techniques for the grammatical analysis of English sentence structures.

- 3523. Special Topics in Advanced Composition** 3(3-0)
 Prerequisite: English 1123.
 For those who want to improve their writing skills beyond the basic composition courses. Various forms of exposition will include articles, essays, reviews, abstracts, summaries, and investigative writing. Attention given to structure, diction, and sentence style. For students preparing for teaching, professional work, graduate study, or general communication. May be repeated for credit with consent of instructor and chair.
- 3713. Special Topics in American Literature and Life** 3(3-0)
 Prerequisite: English 1123.
 Selected aspect(s) of American culture as reflected in American literature, social backgrounds, and the arts. May be repeated for credit with changed content.
- 3723. Special Topics in Literature** 3(3-0)
 Prerequisite: English 1123.
 Concentrated study of selected authors, genres, or themes. May be repeated for credit with changed content.
- 4000. Senior Capstone**
 Prerequisite: For English majors in their final semester.
 A class that will meet for ten hours and include assignments that will help the English Department assess the quality of the undergraduate English program – curriculum, knowledge acquisition, teaching, and advising.
- 4013. Introduction to Composition Studies** (formerly 3533) 3(3-0)
 Prerequisites: Six hours of English beyond 1123 or consent of chair.
 This course provides students with an introduction to the multiple theories of writing and familiarizes them with a rich range of composition pedagogies.
- 4203. Writing Project Management** 3(3-0)
 Prerequisite: English 1123.
 For students of all disciplines who want to develop knowledge of and skills in writing project management. Focus on team-produced documents for publication in a variety of media. Discussion and practice of techniques in (a) managing documentation projects; (b) negotiating the major phases of the information-development process, including planning, design, development, production, and evaluation; and (c) collaborating and problem solving with team members.
- 4213. Special Topics in Professional and Technical Writing** 3(3-0)
 Prerequisite: English 1123.
 Advanced study of current issues, theories, and practices in professional writing and information design. May be repeated for credit with changed content.
- 4513. History of the English Language** 3(3-0)
 Prerequisites: Six hours of English beyond 1123 or consent of chair.
 The development of the sounds, forms, and structure of English and the implications of modern language problems.
- 4523. Introduction to Linguistics** 3(3-0)
 Prerequisites: Six hours of English beyond 1123 or consent of chair.
 Methods and nature of language; the interlocking systems that make up language; methods of language analysis.

4533. Literary Criticism 3(3-0)

Prerequisites: Six hours of English beyond 1123 or consent of chair.

A survey of historical and contemporary methods of literary criticism and their application to selected texts. Recommended especially for those intending to teach literature or pursue graduate study in English.

4543. Special Topics in Film Narration 3(3-0)

Prerequisites: Six hours of English beyond 1123 or consent of chair.

A study of one or more of the elements of narrative as expressed in selected films. May be repeated for credit with changed content.

4553. Rhetorical Theory and Criticism 3(3-0)

Prerequisite: English 1123.

Introduction to theories of rhetoric and examination of different critical lenses for analyzing the persuasive or contextual elements of written or spoken texts.

COURSES IN AMERICAN LITERATURE

4623. American Romantic Movement 3(3-0)

Prerequisites: Six hours of English beyond 1123 or consent of chair.

Emphasis on the poetry and prose of Emerson, Thoreau, Poe, Hawthorne, Melville, and Whitman.

4633. American Realism and Naturalism 3(3-0)

Prerequisites: Six hours of English beyond 1123 or consent of chair.

The realistic and naturalistic approaches in prose fiction with emphasis on Twain, Howells, James, Dreiser, Crane, and Norris.

4643. Literature of the South and Southwest 3(3-0)

Prerequisites: Six hours of English beyond 1123 or consent of chair.

The patterns of Southern and Southwestern themes and culture as exhibited in the works of representative writers.

4653. Modern American Literature 3(3-0)

Prerequisites: Six hours of English beyond 1123 or consent of chair.

A survey of the major American prose writers and dramatists of the first part of the 20th century.

COURSES IN ENGLISH LITERATURE

4706. Chaucer in London 6(3-3)

Prerequisites: English 1123 and junior standing.

The study in London principally of Chaucer's *Canterbury Tales* with emphasis on historical backgrounds, settings, and bibliographic resources. Other Middle English authors may be included. Fieldwork required.

4716. Shakespeare in London 6(3-3)

Prerequisites: English 1123 and junior standing.

The study in London primarily of Shakespearian drama with emphasis on historical backgrounds, settings, performances, and bibliographic resources. Other English Renaissance authors may be included. Fieldwork required.

4753. **Old English Language and Literature** 3(3-0)
Prerequisites: Six hours of English beyond 1123 or consent of chair.
Language, literature, and world view of Anglo-Saxon England. Emphasis on *Beowulf* and the epic tradition.
4763. **Middle English Language and Literature** 3(3-0)
Prerequisites: Six hours of English beyond 1123 or consent of chair.
Language, literature, and world view of medieval England. Emphasis on Chaucer.
4773. **Shakespeare** 3(3-0)
Prerequisites: Six hours of English beyond 1123 or consent of chair.
Shakespeare's art and thought as seen in drama and poetry.
4783. **English Renaissance Period** 3(3-0)
Prerequisites: Six hours of English beyond 1123 or consent of chair.
Renaissance thought and culture as revealed by the poetry, prose, and drama of the age.
4853. **Eighteenth Century English Literature** 3(3-0)
Prerequisites: Six hours of English beyond 1123 or consent of chair.
The literature and intellectual currents of the period with emphasis on Pope, Swift, and Johnson.
4863. **The English Romantic Period** 3(3-0)
Prerequisites: Six hours of English beyond 1123 or consent of chair.
The literature and intellectual currents of the period with emphasis on Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats.
4873. **The Victorian Period** 3(3-0)
Prerequisites: Six hours of English beyond 1123 or consent of chair.
The literature and major developments during the age of Tennyson, Browning, and Arnold.
4883. **Twentieth Century English Literature** 3(3-0)
Prerequisites: Six hours of English beyond 1123 or consent of chair.
Authors and trends in English literature of the 20th century.
4893. **The English Novel** 3(3-0)
Prerequisites: Six hours of English beyond 1123 or consent of chair.
Representative English novels with focus on the development of the genre, major themes, and techniques.

COURSES IN WORLD LITERATURE

4903. **Special Topics in Comparative Literature** 3(3-0)
Prerequisites: Six hours of English beyond 1123 or consent of chair.
Comparative study of selected authors or themes of different cultures or times as reflected in literature. May be repeated for credit with changed content.
4913. **Special Topics from National Literatures in Translation** 3(3-0)
Prerequisites: Six hours of English beyond 1123 or consent of chair.
Selected topics and works in translation from one or more major national literatures. May be repeated for credit with changed content.

4923. **Modern Poetry** 3(3-0)
 Prerequisites: Six hours of English beyond 1123 or consent of chair.
 Major voices in 20th century poetry with emphasis on Pound, Eliot, Williams, Frost, and Stevens.
4943. **Modern World Literature** 3(3-0)
 Prerequisites: Six hours of English beyond 1123 or consent of chair.
 A survey of the major authors and trends in world literature of the first part of the 20th century.
4953. **Contemporary Literature** 3(3-0)
 Prerequisites: Six hours of English beyond 1123 or consent of chair.
 A selective study of recent literature.

DIRECTED READING OR RESEARCH

4993. **Independent Study in English** 3 semester hours
 Prerequisites: Six hours of advanced English, senior standing, and consent of chair.
 Intensive study for the advanced student of a selected topic or area in language or literature. May be repeated once for credit.

PERKINS-PROTHRO DISTINGUISHED PROFESSORSHIP OF ENGLISH

The Perkins-Prothro Distinguished Professorship of English was established in 2001 by the Perkins-Prothro Foundation to recognize truly outstanding scholarship in the Prothro-Yeager College of Humanities and Social Sciences.

James M. Hoggard, the professor holding this position, is recognized in the literary arts for his regional and national achievements. Professor Hoggard came to Midwestern in 1966. The author of twenty books and numerous stories, poems, essays, and translations published nationally and internationally, he has won awards for his teaching and writing. Among his honors are a National Endowment for the Arts Creative Writing Fellowship grant, Hardin Professor of the Year award, the Texas Institute of Letters Short Story Award, the Soeurette Diehl Fraser Award for literary translation, finalist for the National Poetry Series competition, Texas Poet Laureate, the Stanley Walker Award for newspaper journalism, and citations of distinction in *The Best American Short Stories* and *The Yearbook of American Poetry*, among others. He has also served two terms as president of The Texas Institute of Letters and is a former president of the Texas Association of Creative Writing Teachers. He has had seven of his plays produced, including two in New York. Among his books are *Triangles of Light: The Edward Hopper Poems*, *Wearing The River: New Poems*, *Patterns of Illusion: Stories & A Novella*, *Medea in Taos & Other Poems*, *Riding The Wind & Other Tales*, *Elevator Man*, *Trotter Ross*, *Breaking An Indelicate Statue*, *The Shaper Poems*, *Two Gulls One Hawk*, *Eyesigns*, and seven collections of translations, including *Ashes in Love*, *The Art of Dying*, *Love Breaks*, *Chronicle of My Worst Years*, *Stolen Verses & Other Poems*, *Alone Against the Sea: Poems from Cuba*, and *Splintered Silences*. In 2006, the Texas Institute of Letters gave him the Lon Tinkle Award for Excellence Sustained Throughout a Career. In 2007, he was named winner of the PEN Southwest Poetry Award for his book *Wearing the River: New Poems*. In 2011, Professor Hoggard was elected a Fellow of the Texas Institute of Letters and also was elected into membership in the Philosophical Society of Texas.

FOREIGN LANGUAGES

Adalberto Garcia, Chair (Bea Wood Hall 116)

Professors: Fuertes-Manjón, McClintock

Associate Professors: Garcia, Hollabaugh, Montoya

Instructor: Butler

Professors Emeriti: Hoggard, Klein, Volk, Wiedemann

Basic courses are offered in French, German, and Spanish. Spanish offers a major and a minor program. French offers a field of concentration and a minor program. Students majoring or minoring in a foreign language may use foreign language literature survey courses to satisfy the humanities and B.A. requirements in literature. Students seeking Teacher Certification in Spanish or French must pass a qualifying exam prior to being admitted to student teaching.

Proficiency Exams: Students may earn credit by passing an examination (with a grade of C or better) prior to registration which would allow them to enroll in advanced courses. See page 64 concerning Proficiency Exams and contact the chair for more information.

FRENCH

Program

Field of Concentration (18 semester hours of advanced French beyond 2233)

A student can major in International Studies, English, or Humanities with a field of concentration in French.

Minor (12 semester hours of advanced French beyond 2233)

The requirements for the degree of Bachelor of Arts with a teaching certificate may be found on page 150.

COURSES IN FRENCH (FREN)

1134. **Elementary French** (TCCNS = FREN 1411) 4(4-0)
 For students who have had no previous instruction in the language or have had one year of high school French. Emphasis is placed on patterns of French pronunciation and grammar as well as the acquisition of basic reading, writing, and conversational skills. One hour of laboratory practice per week is required.
1234. **Elementary French** (TCCNS = FREN 1412) 4(4-0)
 Prerequisite: French 1134.
 Continuation of French 1134. One hour of laboratory practice per week is required.
2133. **Intermediate French** (TCCNS = FREN 2311) 3(3-0)
 Prerequisite: French 1234.
 Detailed study of French grammatical structures and practice in speaking, understanding, reading, and writing in French.
2233. **Intermediate French** (TCCNS = FREN 2312) 3(3-0)
 Prerequisite: French 2133.
 Continuation of French 2133.

3033. **French Civilization** 3(3-0)
Prerequisite: French 2233.
Study of the history, geography, and culture of France from Gaul to the present.
3133. **Survey of French Literature I** 3(3-0)
Prerequisite: French 2233.
An historical survey of French literature of the Middle Ages, the Renaissance, and the Classical period.
3233. **Survey of French Literature II** 3(3-0)
Prerequisite: French 2233.
An historical survey of French literature of the period of the Encyclopedists and Philosophes, of Romanticism and Realism, and of modern trends in French literature.
3333. **French Conversation and Composition** 3(3-0)
Prerequisite: French 2233.
Intensive practice in conversation aimed at attaining fluency. Class discussion of compositions to improve grammar and style.
4013. **Special Topics in French** 3(3-0)
Prerequisite: French 2233.
Topics will vary and may include such subjects as French Literature and Film, French-English Translation Studies, French Short Story, and French Civilization. This course may be repeated for credit when topics vary.
4133. **Advanced Grammar and Composition** 3(3-0)
Prerequisite: French 2233.
Study of advanced grammar to further develop oral communication and compositional skills.
4233. **The Nineteenth Century in France** 3(3-0)
Prerequisite: French 2233.
Study of this very rich literary and artistic century in France. This course covers romanticism, realism, symbolism, and naturalism in the writings of Hugo, Balzac, Stendhal, Flaubert, Baudelaire, Mallarmé, Rimbaud, Verlaine, and Zola.
4533. **Independent Study in French** 3 semester hours
Prerequisite: French 3133 or 3233.
For advanced students with consent of instructor. Special topics assigned for research and investigation.

GERMAN

The Department of Foreign Languages also offers courses in German.

COURSES IN GERMAN (GERM)

1134. **Elementary German** (TCCNS = GERM 1411) 4(4-0)
For students who have had no previous instruction in the language or have had one year of high school German. Emphasis is placed on patterns of German pronunciation and grammar as well as the acquisition of basic reading, writing, and conversational skills. One hour per week of laboratory practice is required.

1234. **Elementary German** (TCCNS = GERM 1412) 4(4-0)
 Prerequisite: German 1134.
 Continuation of German 1134. One hour per week of laboratory practice is required.
2133. **Intermediate German** (TCCNS = GERM 2311) 3(3-0)
 Prerequisite: German 1234.
 A detailed study of German grammatical structures, synonyms, antonyms, and principles of composition. Study and use of the most common German idioms through conversation.
2233. **Intermediate German** (TCCNS = GERM 2312) 3(3-0)
 Prerequisite: German 2133.
 Continuation of German 2133.
4634. **Independent Study in German** 4(4-0)
 Prerequisite: Consent of the instructor and chair.
 Individual study in a topic selected by the student and the instructor. May be repeated once.

SPANISH

The requirements for the Bachelor of Arts degree with a major in Spanish are as follows:

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

Bachelor of Arts (see page 93)

Program

Major (24 semester hours at the advanced level)

Spanish 3013 or 3023; 3003; 3333; 6 hours from 3133, 3233, 3533, 3633; 4133 or 4233; 4433; and 3 hours of electives

Minor (18 semester hours at the advanced level)

Spanish 3013 or 3023; 3003, 3333; and 9 hours of electives

The requirements for the degree of Bachelor of Arts with a teaching certificate may be found on page 159.

All Spanish majors and minors must take a departmental oral proficiency exam and a written comprehensive exam during their senior year. Contact the Department of Foreign Languages office to make testing arrangements.

COURSES IN SPANISH (SPAN)

1134. **Elementary Spanish I** (TCCNS = SPAN 1411) 4(4-0)
 A beginning course in the development of fundamental speaking, listening, reading, and writing skills in the Spanish language and an introduction to Hispanic cultures. One hour of laboratory practice per week is required.

1234. **Elementary Spanish II** (TCCNS = SPAN 1412) 4(4-0)
 Prerequisite: Spanish 1134.
 Continuation of Spanish 1134. One hour of laboratory practice per week is required.
2133. **Intermediate Spanish I** (TCCNS = SPAN 2311) 3(3-0)
 Prerequisite: Spanish 1234.
 Continued development of language skills. Grammar review and study of Hispanic cultures. Weekly lab practice required.
2233. **Intermediate Spanish II** (TCCNS = SPAN 2312) 3(3-0)
 Prerequisite: Spanish 2133.
 Continuation of Spanish 2133. Weekly lab practice required.
3003. **Introduction to Hispanic Literature** 3(3-0)
 Prerequisite: Spanish 2233.
 Readings in prose and poetry in Spanish with emphasis on methods of analysis and understanding of literary movements. Application of techniques through written and oral communication in Spanish. Required of Spanish majors and minors.
3013. **Spanish Civilization** 3(3-0)
 Prerequisite: Spanish 2233.
 Study of the history, geography, and culture of Spain. Use of media in the target culture. Continued development of oral and written communication in Spanish.
3023. **Spanish American Civilization** 3(3-0)
 Prerequisite: Spanish 2233.
 Study of the history, geography, and culture of Spanish America. Continued development of oral and written communication in Spanish.
3133. **Survey of Spanish Literature I** 3(3-0)
 Prerequisite: Spanish 3003.
 A history and general survey of the literature of Spain from the Middle Ages through the 17th century. Practice in critical analysis and language skills through class discussion, papers, and examinations.
3233. **Survey of Spanish Literature II** 3(3-0)
 Prerequisite: Spanish 3003.
 A history and general survey of the literature of Spain from the 18th century to the present. Practice in critical analysis and language skills through class discussion, papers, and examinations.
3333. **Conversation and Composition** 3(3-0)
 Prerequisite: Spanish 2233.
 Extended development of oral and written communication in Spanish. Intensive grammar review and vocabulary expansion for a variety of situations and topics. Required of Spanish majors and minors.
3533. **Survey of Spanish American Literature I** 3(3-0)
 Prerequisite: Spanish 3003.
 A history and general survey of the literature of Spanish America from Pre-Columbian times up to the 20th century. Practice in critical analysis and language skills through class discussion, papers, and examinations.

- 3633. Survey of Spanish American Literature II** 3(3-0)
 Prerequisite: Spanish 3003.
 A history and general survey of the literature of Spanish America of the 20th century. Practice in critical analysis and language skills through class discussion, papers, and examinations.
- 4013. Special Topics in Spanish** 3(3-0)
 Prerequisite: Spanish 3003.
 Concentrated study in a particular genre, sub-genre, or theme in Hispanic literature. Topics will vary and may include such subjects as Women's Studies, Golden Age Literature, Spanish or Spanish American Drama, Poetry, Novel, or Short Story. May be repeated for credit when topics vary.
- 4133. Advanced Oral Expression** 3(3-0)
 Prerequisite: Spanish 3333.
 Further development of oral proficiency in formal and informal settings and study of phonetics. No student who has graduated from a secondary school in a Spanish-speaking country may enroll in this course.
- 4233. Advanced Grammar and Composition** 3(3-0)
 Prerequisite: Spanish 3333.
 Further development of writing skills through intensive practice writing and re-writing. Includes grammar review and the study of writing and stylistics.
- 4433. Advanced Comprehensive Skills** 3(3-0)
 Prerequisites: 15 advanced hours of Spanish.
 Consolidation of vocabulary and grammar through practice of language functions. Further development of listening and reading skills. Review of language structures, Hispanic culture, geography, history, and literature. Required of all students seeking teacher certification in Spanish.
- 4633. Independent Study in Spanish** 3(3-0)
 Prerequisites: 6 advanced hours of Spanish, senior standing, and consent of the instructor and chair.
 Individual study in a topic selected by the student and the student's advisor. May be repeated once.

HISTORY

Harry P. Hewitt, Chair (O'Donohoe Hall 222)

Professors: Hewitt, Kindig

Associate Professors: Arnoult, King, Lindemann

Professors Emeriti: Collins, Hendrickson

The requirements for the degree of Bachelor of Arts with a major in history are as follows:

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

Bachelor of Arts (see page 93)

Program**Major** (30 semester hours)

History 1133, 1233, 1333, 1433, 3903, and 15 additional semester hours

Minor to be selected in a field acceptable to the chairs of the major and minor programs**REQUIREMENTS FOR A MINOR IN HISTORY** (21 semester hours)

History 1133, 1233, 1333, 1433, and nine additional semester hours, selected with approval of the chair.

COURSES IN HISTORY (HIST)**SURVEY COURSES**

1133. **Survey of American History to 1865** (TCCNS = HIST 1301) 3(3-0)
 General survey of American History from its European origins to 1865. Required of all baccalaureate students.

1233. **Survey of American History since 1865** (TCCNS = HIST 1302) 3(3-0)
 General survey of American History from 1865 to the present. Required of all baccalaureate students.

1333. **Survey of Western Civilization** (TCCNS = HIST 2311) 3(3-0)
 An examination of the traditions which contributed to the intellectual background of modern Western society. The course spans the period beginning with the early civilization of Egypt and Mesopotamia through classical Greece and Rome to the Western Middle Ages concluding with the Renaissance and Reformation and the dawn of the modern era.

1433. **Survey of Western Civilization** (TCCNS = HIST 2312) 3(3-0)
 An examination of the traditions which have directly contributed to the formation of the intellectual and cultural structure of modern western society. The course begins with the Scientific Revolution and the emergence of modern nation states and examines the development of democratic movements and the Industrial Revolution continuing through the wars and disorders of the twentieth century.

HISTORY COURSES FOR ADVANCED UNDERGRADUATES

3003. **Survey of Texas History** 3(3-0)
 Prerequisites: Six hours of American History.
 This course examines Texas history from the time of discovery to the late twentieth century. Topics examined include the Spanish colonial period, Anglo colonization, the Texas Revolution, early statehood, the Civil War and Reconstruction, the cattleman's frontier, the oil industry, and modern Texas politics.

3033. **American Beginnings: From Discovery to the Revolution** 3(3-0)
 Prerequisites: Six hours of history or consent of the chair.
 After the migration of man across the Bering Straits, the great Indian civilizations appeared followed by the first European colonies in the sixteenth and seventeenth centuries. Settlement spread, and an American society flowered represented by such figures as William

Byrd, Benjamin Franklin and Thomas Jefferson -- until estrangement from England provoked a crisis that finally touched off the American Revolution.

3103. Medieval England 3(3-0)

Prerequisites: HIST 1333 and three additional hours of history or consent of the chair.

A survey of the forces and events which dominated English development from the times of the Romans to the advent of the Tudors to the throne in 1485. The course focuses on the constitutional development of England and discusses the contributions of the Anglo-Saxons and Normans as well as others.

3123. Early Modern England 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

A survey of English history during the reign of the Tudors and the Stuarts, from 1485 until the death of Queen Anne in 1714. The course covers the English Reformation and the Elizabethan era, as well as the English Civil War and Glorious Revolution.

3133. Comparative World Religions and Cultures 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

A study of the major world religions and cultural traditions with an emphasis on Hinduism, Buddhism, Judaism, Christianity, and Islam.

3153. Modern Britain and British Empire 3(3-0)

Prerequisites: HIST 1233 and 1433 or consent of the chair.

A survey of British history and the history of the British Empire, from the creation of Great Britain with the Act of Union in 1710 to decolonization after World War II. Areas of focus include the Industrial Revolution, the development of parliamentary democracy, the world wars of the twentieth century, and the differing trajectories of empire both by century and region.

3233. Ancient Greece and Rome 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

A study of the development of Greece and the Bronze Age through the Classical Age of Socrates, Plato, and Aristotle with the emergence of Rome as an imperial power and its expansion through the Mediterranean world. The course concludes with an examination of early Christianity and the collapse of the Roman political system.

3503. Early Russia and Tsardom 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

A survey of Russian history from earliest times to the peak of Romanov power and prestige.

3513. The Modern Russian State and Empire 3(3-0)

Prerequisites: Six hours of history or the consent of chair.

Russian history from 1801 to the present. The crisis and collapse of autocracy, the revolutions, reaction, superpower status, and the decline and fall of empire are some of the major topics covered in this course.

3833. Latin American History, Colonial Period 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

This course investigates the Indian, White, and Black cultures which made up the ethnic and cultural diversity in Ibero-America. The discovery, conquest, and settlement of Ibero-America are covered in detail as are such institutions as the church, encomienda, and the

military. The course concludes with a discussion of the impact of the reforms of Charles III as they affected Latin America and initiated the independence movement.

3843. Latin American History, Republican Period-Nineteenth Century 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

This course traces the independence of Ibero-American Nations and explains the factionalization caused by the collapse of Spain's empire and the power struggles that resulted. Institutions such as caudillismo, the church, the military, and their impact are discussed as they developed during the 19th century.

3903. The Writing of History 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

This course, required of all history majors who are not seeking teacher certification, is designed to further develop and refine the student's aptitude for historical investigation, analysis, and presentation. Particular emphasis is placed on improving the student's ability to write history and conduct in-depth research at the undergraduate level, thus giving the student a strong foundation in the skills necessary for practicing the craft of history.

4023: United States Diplomatic History, 1898-1989 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

A study of United States diplomatic relations in the twentieth century, from the opening of the Spanish-American War to the conclusion of the Cold War. The course will survey the history of United States foreign policy, beginning with American emergence from a tradition of isolation to a position of world leadership and world power. Topics will include the diplomacy of both world wars, the policy of containment underlying the Korean and Vietnam conflicts, relations with the Soviet Union and China, U.S.-Latin American affairs, and American approaches to the Arab-Israeli conflict.

4043. The Old South 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

This course traces the growth of Southern culture; economics and politics from the establishment of the first Southern Colonies to the Civil War. Emphasis is placed upon such topics as social organization, slavery, states rights, and the creation of the Confederacy--always relating developments in the South to events in the nation at large.

4053. Civil War and Reconstruction 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

The bitter sectional conflicts touched off by slavery and westward expansion provoked a mounting crisis in the 1850's--ending in the election of 1860. The course then turns to the battlefield and the question of why the South lost. It concludes with an examination of the attempt to reintegrate the South into the Union and the angry social and political clash that was precipitated.

4073. The Era of Reform: Populism and Progressivism in America 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

A study of the background and development of the agrarian reform movements of the late nineteenth century culminating in the rise and fall of the Populist party, the urban-industrial movements in America during the early twentieth century including municipal, general political, labor, child labor, social welfare, and other movements.

4083. The Age of Washington and Jefferson 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

Federalists and Jeffersonians struggled over the destiny of the young Republic--would it be a unitary, entrepreneurial nation, or an agrarian confederation? Complicating the battle were economic change, and the acquisition of the Louisiana territory, even as Europe began to threaten American commerce and ultimately the independence of the republic.

4093. The Jacksonian Era 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

Using Andrew Jackson as a symbol of his age, the course traces the acrimonious partisan conflict which gave birth to mass democracy and a new two-party system. This is related to such crucial issues as to the bank war, nullification, minority rights and the Mexican War, questions fostered by rapid industrialization, and the migration of pioneers to the Pacific.

4133. America: From the Jazz Age to the Nuclear Age 3(3-0)

Prerequisites: Six hours of American history or consent of the chair.

A study of American life from the end of World War I to the end of World War II with special emphasis upon the prosperity of the twenties, the Great Depression, the New Deal, and the domestic and foreign policy problems of the World War II period.

4143. The New South 3(3-0)

Prerequisites: Six hours of American history or consent of the chair.

The development of the New South from the legacy of the Civil War and Reconstruction. Southern politics, economics, cultural, and industrial development.

4163. Contemporary America: From the End of World War II to the Present 3(3-0)

Prerequisites: Six hours of American history or consent of the chair.

A study of American life and foreign policy trends since 1945 with special emphasis upon the major political, economic, and social changes that have affected the lives of all Americans.

4173. History of Mexico 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

A survey of Mexican history from Pre-Hispanic times to the present with emphasis on the National Period 1820-1967, which includes the age of Santa Anna, La Reforma, the Diaz Dictatorship, and the Revolution of 1910.

4183. Latin America: Nationalism in the Twentieth Century 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

Course will emphasize Vargas in Brazil, Peron in Argentina, Castro in Cuba, Allenda in Chile, and such currently popular problems as those found in Central America.

4213. Europe in the Middle Ages 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

A study of the social, political, and intellectual traditions of western society as they developed after the Germanic invasions. Emphasis will be placed on the evolution of feudal society and its interaction with the community of the Christian church.

4253. Renaissance and Reformation 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

A study of the development of European society in the era of the Black Death, of overseas discoveries, of the Renaissance and Reformation. The emphasis of the course will be a topical study of Renaissance humanism and a detailed analysis of the impact of the Reformation on the doctrines and structure of western Christianity.

4263. **Modern France** 3(3-0)
Prerequisites: Six hours of history or consent of the chair.
A study of French History from the sixteenth century to the end of the nineteenth century. The course will focus on such topics as the Age of Louis XIV, Napoleon, and the Dreyfus Affair.
4373. **Modern Germany** 3(3-0)
Prerequisites: Six hours of history or consent of the chair.
This course details the development of Germany from a region of multiple independent states during the Reformation to a strong and united World Power by the end of the nineteenth century. Highlights include The Thirty Years' War, Frederick the Great, Otto von Bismarck, and the roots of modern German nationalism.
4433. **Twentieth Century Europe** 3(3-0)
Prerequisites: Six hours of history or consent of the chair.
Development of Europe from the beginning of the twentieth century to the present with emphasis on developments since World War I.
4523. **Eastern Europe** 3(3-0)
Prerequisites: Six hours of history or consent of the chair.
An examination of the various Eastern European countries, including the Balkans, from earliest times to the present. Particular emphasis on nineteenth and twentieth century social, political, economic, and religious trends and institutions. The course will also include a discussion of the collapse of communism and accompanying regional conflicts.
4533. **American Ideas** 3(3-0)
Prerequisites: Six hours of history or the consent of the chair.
A survey of the major intellectual currents which have shaped American thought, including Puritanism, the Enlightenment, Romanticism, Transcendentalism, Utopian Idealism, Social Darwinism, and Pragmatism. This course traces the changing intellectual patterns which have characterized the development of American civilization.
4543. **History of the Middle East** 3(3-0)
Prerequisites: Six hours of history or consent of the chair.
Includes a survey of pre-Islamic society, the rise and spread of Islam, the rise of the Ottoman and Safavid Empires, European Imperialism, and the contemporary Middle East.
4613. **The American West, 1803-1890** 3(3-0)
Prerequisites: Six hours of history or consent of the chair.
This course surveys westward expansion from the Mississippi River to the Pacific. From Lewis and Clark to Wounded Knee, from the fur traders' frontier to the farmers' frontier, this course surveys the sweeping movement of the American people across the trans-Mississippi West.
4643. **United States-Latin American Relations** 3(3-0)
Prerequisites: Six hours each of history and political science, and consent of the chair.
Survey of the relations of the U.S. with Latin America from independence to the present. The course keys on the Monroe Doctrine and U.S. policy from the Latin American perception of that policy. The course also covers in some detail U.S. relations with Argentina, Chile, Cuba, and Mexico.

4653. **United States Military History** 3(3-0)
 Prerequisites: Six hours of history or consent of the chair.
 An analysis of the actions of the armed forces in five major conflicts. Emphasis will be placed on tactical and strategic decision making, personalities, force structures, and the application of technological innovations to warfare. Conflicts to be studied are the Revolution, The Civil War, World Wars I and II, and Vietnam.
4663. **Everyday Life in Europe, 1500-1950** 3(3-0)
 Prerequisites: HIST 1133, 1233; 1333, 1433 or consent of instructor.
 This course covers the social history of Europe from the Reformation era through World War II. It examines how historical developments affected the lives of ordinary European men and women, including such areas as the life-cycle, material conditions, social issues and popular culture.
4673. **History of Women in the United States and Great Britain** 3(3-0)
 Prerequisites: HIST 1133, 1233; 1333, 1433 or consent of chair.
 This course examines the lives of women in the United States and Great Britain from around 1600 to the present. Its central focus is how the factor of gender, along with other factors such as class and race, affected the historical experience of women.
4933. **Special Topics in History** 3(3-0)
 Prerequisites: Six hours of history.
 Topics vary. May be repeated with different content.
4953. **Independent Study in History** 3 semester hours
 Prerequisites: Six hours of history or consent of the chair.
 This is an undergraduate independent readings course available on a limited basis to advanced students. Topics will be selected by the student and his/her advisor.

GEOGRAPHY

The Department of History also offers courses in geography.

COURSES IN GEOGRAPHY (GEOG)

3003. **Geography of the World** 3(3-0)
 Regional, social, and economic characteristics of the geography of the world.
3013. **Geography of North America** 3(3-0)
 Physiographic and natural resource characteristics of North America with emphasis on the United States.
3023. **Cultural Geography** 3(3-0)
 An introduction to human achievements and their expression and diffusion across the geographic landscape: Topics to be considered include agriculture, language, religion, political organization, technology, and other cultural aspects.
3033. **Population Geography** 3(3-0)
 A study of issues related to spatial distribution, demographic phenomena, population growth and decline, settlement patterns, occupational structure, mobility, and migration.

HARDIN DISTINGUISHED PROFESSORSHIP OF AMERICAN HISTORY

For many years, the Hardin Foundation for Wichita County has supported Midwestern State University through grants and awards. These programs include the Hardin Scholar and the Hardin Professor Awards given each year respectively to the outstanding rising junior student and an outstanding member of the faculty. Additionally, the Foundation has supported the development of a truly outstanding American History Collection in Moffett Library. In 1987, the Foundation created the Hardin Distinguished Professorship of American History.

HUMANITIES

Advisor: Lynn Hoggard (Bea Wood Hall 201)
Professors Emeriti: L. Hoggard, Olson

REQUIREMENTS FOR A MAJOR IN HUMANITIES

The requirements for the degree of Bachelor of Arts with a major in humanities include the following three components:

- I. General** (see page 89)
Academic Foundations and Core Curriculum (see page 91) (48 semester hours)
Bachelor of Arts (see page 93)

- II. Humanities Interdisciplinary Major** (36 semester hours)
 - Humanities: 3-6 hours chosen from 2013, 2023, 2033, 2043
6-9 hours chosen from 4013, 4023, 4033, 4043
(Courses of the same title cannot be taken at both the 2000 and 4000 levels.)
 - English: 2413, 2423
 - History: 1333, 1433
 - Philosophy: 2233 or 3233
 - Art: 1413
 - Theatre: 1503
 - Music: 1033
 (An advanced course in the history of the art form may be substituted for all but the Academic Foundations requirements; e.g., Art History for Art 1413; Music Survey for Music 1033; or History and Aesthetics of the Theatre for Theatre 1053.)

- III. Field of Concentration** (18-24 hours, to make a total of 24 hours in one of the following fields, beyond Academic Foundations requirements)

The completion of any of the following fields of concentration satisfies the requirements for a minor.

- Art** (21 semester hours)
ART 1113, 1313, 4433, 4443, plus 9 advanced studio hours chosen to survey studio options rather than achieve specialization.

English (18 semester hours)

18 hours from advanced English courses, but may include only one writing course and one English language course.

French (18 semester hours)

18 hours of courses beyond 2233.

History (18 semester hours)

18 hours of advanced History courses; may include 4603 or 4613, but not both.

Music (21 semester hours)

21 hours including at least 6 in Music Theory; at least 9 advanced hours, including Music History and Music Literature; may also include up to 6 advanced hours in a performance area.

Philosophy (21 semester hours)

21 hours including 12 advanced hours from Philosophy listing.

Political Science (24 semester hours)

24 hours from advanced Political Science courses, but may include only one course from Law or Public Administration offerings.

Spanish (18 semester hours)

18 hours of courses beyond 2233; 3333 may not be repeated.

Theatre (21 semester hours)

21 hours from Theatre 4143, 4433, 4443; English 3253, 3303, 3313, and 4773; may include 6 hours of advanced acting or directing classes.

REQUIREMENTS FOR A MINOR IN HUMANITIES (18 semester hours)

Humanities: 3-6 hours chosen from 2013, 2023, 2033, 2043; 6-9 hours chosen from 4013, 4023, 4033, 4043; (courses of the same title cannot be taken at both the 2000 and 4000 levels); History 1333, 1433.

COURSES IN HUMANITIES (HUMN)**2013. Humanities: The Ancient World**

3(3-0)

Prerequisite: English 1123 or consent of instructor.

A study of the inter-relationships of literature, music, art, and philosophy in an historical context with emphasis on Mesopotamia, Egypt, Greece and Rome, Judaism, and early Christianity.

2023. Humanities: Medieval Cultures

3(3-0)

Prerequisite: English 1123 or consent of instructor.

A study of the inter-relationships of literature, music, art, and philosophy in an historical context with emphasis on Byzantine, Islamic, European, Indian, Chinese, Japanese, and North and South American cultures.

2033. Humanities: Renaissance through Realism

3(3-0)

Prerequisite: English 1123 or consent of instructor.

A study of the inter-relationships of literature, music, art, and philosophy in an historical context with emphasis on the Renaissance, the Baroque style, the Enlightenment, Romanticism, and Realism (fifteenth through late-nineteenth centuries).

2043. **Humanities: Mid-Nineteenth through Twentieth Centuries** 3(3-0)
 Prerequisite: English 1123 or consent of instructor.
 A study of the inter-relationships of literature, music, art, and philosophy in an historical context with emphasis on the Industrial Revolution, Modernism, Cultural Plurality, and Postmodernism.
2053. **Humanities** (TCCNS = HUMA 1301) 3(3-0)
 Prerequisite: English 1123 or consent of instructor.
 A study of the inter-relationships of literature, music, art, and philosophy in an historical context.
2063. **Humanities** (TCCNS = HUMA 1302) 3(3-0)
 Prerequisite: English 1123 or consent of instructor.
 A continuing study of the inter-relationships of art, myth, literature, and philosophy in an historical context.
3073. **Special Topics in Humanities** 3(3-0)
 Prerequisite: English 1123.
 Thematic topics for the course will usually grow out of work being done in the Center for the Study of Reform. Each course will likely be team taught, and each will be offered as an honors course. Course may be repeated for credit with changed content.
4013. **Humanities: The Ancient World** 3(3-0)
 Prerequisite: English 1123 or consent of instructor.
 A study of the inter-relationships of literature, music, art, and philosophy in an historical context with emphasis on Mesopotamia, Egypt, Greece and Rome, Judaism, and early Christianity. Individual research and evidence of the ability to synthesize the expressions of the different art forms within a cultural period will be required. May not be taken if student has received credit for Humanities 2013.
4023. **Humanities: Medieval Cultures** 3(3-0)
 Prerequisite: English 1123 or consent of instructor.
 A study of the inter-relationships of literature, music, art, and philosophy in an historical context with emphasis on Byzantine, Islamic, European, Indian, Chinese, Japanese, and North and South American cultures. Individual research and evidence of the ability to synthesize the expressions of the different art forms within a cultural period will be required. May not be taken if student has received credit for Humanities 2023.
4033. **Humanities: Renaissance through Realism** 3(3-0)
 Prerequisite: English 1123 or consent of instructor.
 A study of the inter-relationships of literature, music, art, and philosophy in an historical context with emphasis on the Renaissance, the Baroque style, the Enlightenment, Romanticism, and Realism (fifteenth through late-nineteenth centuries). Individual research and evidence of the ability to synthesize the expressions of the different art forms within a cultural period will be required. May not be taken if student has received credit for Humanities 2033.
4043. **Humanities: Mid-Nineteenth through Twentieth Centuries** 3(3-0)
 Prerequisite: English 1123 or consent of instructor.
 A study of the inter-relationships of literature, music, art, and philosophy in an historical context with emphasis on the Industrial Revolution, Modernism, Cultural Plurality, and Postmodernism. Individual research and evidence of the ability to synthesize the expressions

of the different art forms within a cultural period will be required. May not be taken if student has received credit for Humanities 2043.

4053. Humanities: World Civilizations 3(3-0)

Prerequisite: English 1123 or consent of instructor.

A study of inter-relationships in world civilizations of literature, philosophy, mythology, art, and architecture in an historical context with emphasis on the Western tradition, including relationships to Middle Eastern, African, Indian, and Chinese traditions.

4063. Independent Study in Humanities 3 semester hours

Intensive study by a student who has completed the Humanities sequence in a selected topic which deals with the inter-relationships of different cultural forms of expression.

INTERNATIONAL STUDIES

Advisor: Michael A. Preda (O'Donohoe Hall 204)

The interdisciplinary major in International Studies shall provide the student with a broadly based liberal arts foundation while at the same time developing the student's global perspective and understanding of cross-cultural concerns. Specialization in advanced studies of Economics, History, and Political Science shall enhance the student's awareness of the wide range of global issues which transcend national and regional boundaries, thus ensuring that the student is empowered with the expanse of knowledge which crosses disciplinary, cultural, economic, and geographic borders.

General (see page 89)

Academic Foundations and Core Curriculum (see page 91) (ECON 2333)

Bachelor of Arts (see page 93)

REQUIREMENTS FOR A MAJOR IN INTERNATIONAL STUDIES:

Required Courses: 15 hour core for interdisciplinary major

HIST 1333, 1433, 3133	9 hours
GEOG 3003	3 hours
SOCL 3783	3 hours

Political Science, 6 hours chosen from the following: 6 hours

POLS 3533, 3543, 3553, 3563, 3573, 3583, 3593, 3653, 4333,
4453, 4653, 4773, 4853, 4933

Economics, 6 hours chosen from the following: 6 hours

ECON 3553, 3713, 4663, 4723

History, 6 hours chosen from the following: 6 hours

HIST 3103, 3123, 3153, 3503, 3513, 3833, 3843, 4023, 4173, 4183,
4213, 4253, 4263, 4373, 4433, 4523, 4543, 4643, 4663, 4673

TOTAL 33 hours

In order to enhance the student's global awareness and perspective, a minor should be chosen from the following fields: Economics, History, Political Science, French, or Spanish.

FIELD OF CONCENTRATION – French (18 semester hours beyond 2233)

REQUIREMENTS FOR A MINOR IN INTERNATIONAL STUDIES:

OPTION I: (18 semester hours)

GEOG 3003, six hours chosen from Category 1, six hours chosen from Category 2, plus three hours chosen from the student's area of specialization as approved by the international studies advisor.

Category 1: Six hours from the following:
BUAD 4993, ECON 3553, ECON 4723, MKTG 4643

Category 2: Six hours from the following:
POLS 3533, 3653, 4333, 4653, 4853, 4933
HIST 4183, 4433, 4523, 4543, 4643
ENGL 2413, 2423, 3003, 4903, 4913, 4943

For a minor with degrees other than the Bachelor of Arts the student must, in addition, complete two semesters of one foreign language.

OPTION II: (18 semester hours)

GEOG 3003, six hours chosen from Category 1, six hours chosen from Category 2, plus three hours chosen from the student's area of specialization as approved by the international studies advisor.

Category 1: Six hours from the following:
ECON 3553, 3713, 4663, 4723
POLS 3533, 3543, 3553, 3563, 3573, 3583, 3593, 3653, 4333, 4453,
4653, 4753, 4853, 4933

Category 2: Six hours from the following:
HIST 4183, 4433, 4523, 4543, 4643
ENGL 2413, 2423, 3003, 4903, 4913, 4943
FREN 3333, SPAN 3333

For a minor with degrees other than the Bachelor of Arts the student must, in addition, complete two semesters of one foreign language.

PHILOSOPHY

Advisor: Nathan Jun (Bea Wood Hall 221)

Assistant Professor: Jun

Professor Emeritus: Stewart

REQUIREMENTS FOR A MINOR IN PHILOSOPHY (18 semester hours)

Philosophy 1033, 2033, three hours of coursework in the history of philosophy (2233, 2633, 3233, or 3333), and nine additional semester hours of which six must be advanced.

COURSES IN PHILOSOPHY (PHIL)

1033. **The Primary Concerns of Philosophy** (TCCNS = PHIL 1301) 3(3-0)
 Prerequisites: English 1113 and 1123.
 Methods and problems related to man's search for meaning.
1533. **Logic** (TCCNS = PHIL 2303) 3(3-0)
 Prerequisites: English 1113 and 1123.
 The study of principal methods of organizing thought in ordinary language.
2033. **Ethics** (TCCNS = PHIL 2306) 3(3-0)
 Prerequisites: English 1113 and 1123.
 What is the "good" for man: an inquiry into the philosophy of morality.
2133. **Political Philosophy** (TCCNS = PHIL 2307) 3(3-0)
 Prerequisites: English 1113 and 1123.
 A historical and theoretical survey of the main problems of political philosophy through an examination and critical analysis of key thinkers and theories in the tradition.
2233. **Classical Philosophy** (TCCNS = PHIL 2316) 3(3-0)
 Prerequisites: English 1113, 1123, and three hours of philosophy, or permission of philosophy advisor.
 A study of the pre-Socratics, Plato, and Aristotle. Discussion of the contemporary uses of classical philosophy.
2333. **Philosophy of Religion** (TCCNS = PHIL 2321) 3(3-0)
 Prerequisites: English 1113 and 1123.
 A critical examination of the definitions, assumptions, and arguments central to religion. Topics may include interpreting the nature of religion, arguments for and against the existence of God, the relation between theology and philosophy, the relation between God and the world, the problem of evil, and the nature of religious experience.
2633. **Contemporary Philosophy** (formerly 3433) (TCCNS = PHIL 2318) 3(3-0)
 Prerequisites: English 1113, 1123, and three hours of philosophy, or permission of philosophy advisor.
 Twentieth century philosophers, including the methods and history of the various movements.
3233. **Early Modern Philosophy** (formerly 2433) 3(3-0)
 Prerequisites: English 1113, 1123, and three hours of philosophy, or permission of philosophy advisor.
 A survey of philosophical problems from Descartes through Kant.
3333. **Nineteenth Century Philosophy** 3(3-0)
 Prerequisites: English 1113, 1123, and three hours of philosophy, or permission of philosophy advisor.
 A historical and theoretical survey of the key thinkers and philosophical theories of the nineteenth century.
3433. **Existentialism** 3(3-0)
 Prerequisites: English 1113, 1123, and three hours of philosophy, or permission of philosophy advisor.

A historical and theoretical survey of the key thinkers and ideas in existential philosophy from the nineteenth century to present.

3533. Special Topics in Philosophy 3(3-0)

Prerequisites: English 1113, 1123, and three hours of philosophy, or permission of philosophy advisor.

Specialized studies in philosophy. May be repeated when topics vary.

4993. Independent Study in Philosophy 3(3-0)

Prerequisites: English 1113 and 1123.

Individual directed readings, with approval of philosophy advisor or consent of chair. May be repeated once for credit when topics vary.

POLITICAL SCIENCE

Steve Garrison, Chair (O'Donohoe Hall 201)

Professors: Preda, Watson

Associate Professor: Garrison

Assistant Professors: Duff, Narayanan, Veazey

Professors Emeriti: Covert, Dover, Martin, Mertens, Sabota

MISSION STATEMENT FOR THE DEPARTMENT OF POLITICAL SCIENCE

The mission of the Department of Political Science is to foster student political awareness of local, state, regional, national, and international political processes through its core curriculum courses in American and Texas government; as well as its major, minor, and graduate program curricula. In support of the university's larger liberal arts mission, the department is committed to high quality instruction, innovative research, and quality service intended to create a learning environment that will broaden students' political understanding of their place in the global community. The department offers a diverse curriculum that includes a variety of methods of study, topical foci, and instructional approaches designed to develop students' descriptive, critical, and analytical thinking skills. Through classroom instruction, active learning, study abroad, and both national and state service learning programs, the department seeks to create students with both a strong understanding of the impact of past political events on contemporary society and also a contextual understanding of the challenges and promises of the future.

The requirements for the degree of Bachelor of Arts with a major in political science are as follows:

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

Bachelor of Arts (see page 93)

Program Requirements

Major (30 semester hours)

Political Science 1333, 1433, 2523, 3213; 3 hours from: 3313, 4153, 4553; 3 hours from: 3533, 3543, 3553, 3563, 3573, 3583, 3593, 4453; 3 hours from 3653, 4333, 4653, 4773, 4853; 3 hours from 3933, 4133, 4173, 4233, 4243, 4953; 3 hours from: 3233, 3443, 3843, 4043, 4163, 4443, 4463; and 3 additional advanced hours. POLS 4903, 4933, and 4973 can be used to fulfill cluster requirements based on their subject matter in a given semester.

All Political Science majors must complete a minor of at least 18 semester hours of which at least 6 must be advanced. The minor field selected must be acceptable to the chairs of major and minor programs.

REQUIREMENTS FOR A MINOR IN POLITICAL SCIENCE (21 semester hours)

Political Science 1333, 1433, 2523 and 12 additional hours, of which 9 must be advanced.

COURSES IN POLITICAL SCIENCE (POLS)

1333. **American Government** (TCCNS = GOVT 2301) 3(3-0)
 This course, together with Political Science 1433, fulfills the legislative requirement of 6 semester hours of American government. A study of the American national and Texas governmental system. The American experiment in federalism and democracy; origin and development of the United States Constitution; federal state relations; the individual as a citizen; political parties and electoral campaigns.
1433. **American Government** (TCCNS = GOVT 2302) 3(3-0)
 Legislative, executive, and judicial functions in the United States and Texas governments; foreign policy; the conduct of foreign relations; civil liberties and rights; national defense; government and the economy; governmental services. Special attention given to Texas.
2523. **Foundations of Government and Politics** (TCCNS = GOVT 2304) 3(3-0)
 Study of major concepts, theories, and principles of government and politics. Designed to provide a basic understanding of the institutions and processes of government.
3213. **Research Methods** 3(3-0)
 Prerequisites: Six hours of political science.
 Introduction to legal and social science research methods with emphasis on practical application. Includes basic procedures of survey research, quantitative analysis, and research design development.
3233. **American Political Parties and Pressure Groups** 3(3-0)
 Prerequisites: Six hours of political science.
 The American political system and pressure groups, with particular attention to their development, present structures, and roles in the American political system.
3313. **Introduction to Political Theory** 3(3-0)
 Prerequisites: Six hours of political science.
 A basic survey and evaluation of the major classical and contemporary theories of politics. Special emphasis on the influence of classical political philosophy on modern democratic theory.
3443. **Municipal Government and Metropolitan Problems** 3(3-0)
 Prerequisites: Six hours of political science.
 Study of the structure, functions, and politics of local government with special emphasis on the problems of governing metropolitan areas.
3533. **Government and Politics of Western Europe** 3(3-0)
 Prerequisites: Six hours of political science.

A comparative study of modern political institutions and processes, with particular attention to the United Kingdom, France, and Germany.

3543. Government and Politics of Eastern Europe 3(3-0)

Prerequisites: Six hours of political science.

A comparative study of the political institutions and processes in the region, with particular attention to Poland, Hungary, and the Czech Republic.

3553. Government and Politics of Central Eurasia 3(3-0)

Prerequisites: Six hours of political science.

A comparative study of the political institutions and processes of the former Soviet republics with particular attention to the Russian Federation.

3563. Government and Politics of the Middle East 3(3-0)

Prerequisites: Six hours of political science.

A comparative study of the political institutions and processes with particular attention to Middle East nation states.

3573. African Politics 3(3-0)

Prerequisites: Six hours of political science.

This course introduces students to African politics and society by depicting in broad strokes the complexities and diversities of the African world since independence, and investigates new paths of understanding into intricate dynamics.

3583. Government and Politics of Latin America 3(3-0)

Prerequisites: Six hours of political science.

A comparative study of the political institutions and processes of eight Latin American countries. Special attention is given to contemporary topics that affect the region such as populism, bureaucratic authoritarianism, drug trafficking, human rights, and neo-Liberal reform.

3593. Asian Politics 3(3-0)

Prerequisites: Six hours of political science.

Political institutions and structures of China, India, and Southeast Asia, including intrastate conflicts, dictatorships, economic booms and recessions, corruptions, and regime transitions.

3653. International Relations 3(3-0)

Prerequisites: Six hours of political science.

A study of the nation-state systems; critical analysis of principles, problems, and factors involved in the foreign policies and relations of the various states.

3843. The Presidency 3(3-0)

Prerequisites: Six hours of political science.

A study of the Presidency and the executive branch in the American system.

3933. The Judicial System and Process 3(3-0)

Prerequisites: Six hours of political science.

A study of the American judicial system and process at the local, state, and national levels. Topics include judicial selection and judicial policy-making.

4043. **Legislation** (formerly 4013) 3(3-0)
Prerequisites: Six hours of political science.
A study of the role of Congress and the state legislature in the American system.
4133. **Public Administration** 3(3-0)
Prerequisites: Six hours of political science.
Examination of the basic principles involved in the administration and execution of public policy. Includes such topics as organizational theory, personnel management, budgetary procedures, and the politics of administration.
4153. **Quantitative Methods** 3(3-0)
Prerequisites: Six hours of political science and POLS 3213.
Examines theory building and testing, statistical modeling, multivariate analysis, and applications for general social science research.
4163. **Federalism and Intergovernmental Relations** 3(3-0)
Prerequisites: Six hours of political science.
An analysis of the relationships among federal, state, and local governments in the United States with emphasis on the administrative aspects of the expanding area of inter-governmental cooperation.
4173. **Organizational Behavior and Decision Making** 3(3-0)
Prerequisites: Six hours of political science.
Examines individual, interpersonal, and group behavior in the organizational context using both theoretical and quantitative approaches in the study of these concepts.
4233. **American Constitutional Law I** 3(3-0)
Prerequisites: Six hours of political science.
The development of the Constitution through the interpretations of the Supreme Court.
4243. **American Constitutional Law II** 3(3-0)
Prerequisites: Six hours of political science.
A continuation of Political Science 4233. Additional cases in constitutional development. A study of civil rights and civil liberties.
4333. **International Law** 3(3-0)
Prerequisites: Six hours of political science.
The role of the law of nations in world politics, with emphasis on the history, theories, sources, and enforcement of international law.
4443. **Black Politics** 3(3-0)
Prerequisites: Six hours of political science.
An examination of the political behavior of Black Americans in the United States by focusing on the relationship between Black Americans and the various actors, institutions and processes of the American Political System. Special emphasis on contemporary problems, trends, and developments of Black Politics.
4453. **Political Protest and Revolutions** 3(3-0)
Prerequisites: Six hours of political science.
An examination of the study of political protest concentrating on the dynamics of the interaction between the regime and the dissidents. This course provides students with both a factual background of modern political revolutions and protest movements; the course also

examines such theoretical issues as the collective action problem, relative deprivation and resource mobilization theory.

4463. American Public Opinions 3(3-0)

Prerequisites: Six hours of political science.

This course explores the origins of American public attitudes on political issues, how we measure them, and their effects on public policy.

4553. Twentieth Century Political Thought 3(3-0)

Prerequisites: Six hours of political science.

An analysis of recent trends in political thought.

4653. International Political Economy 3(3-0)

Prerequisites: Three hours of economics and six hours of political science.

An examination of the interaction of economics and politics with specific attention to issues in international trade, international finance, and international economic and political development.

4773. International Conflict 3(3-0)

Prerequisites: Six hours of political science.

Major theories behind the study of interstate and intrastate war, terrorism, and other non-state conflicts.

4853. Contemporary American Foreign Policy 3(3-0)

Prerequisites: Six hours of political science.

Study of policies and problems in United States foreign relations since World War II.

4901. Independent Study in Government and Politics 1 semester hour

Prerequisites: Six hours of political science and consent of the department chair.

Supervised reading and research in government and politics.

4902. Independent Study in Government and Politics 2 semester hours

Prerequisites: Six hours of political science and consent of the department chair.

Supervised reading and research in the field of government and politics.

4903. Independent Study in Government and Politics 3 semester hours

Prerequisites: Six hours of political science and consent of the department chair.

Supervised reading and research in the field of government and politics. May be repeated for credit when topics vary.

4933. Special Topics in Government and Politics 3(3-0)

Prerequisites: Six hours of political science.

Topics vary. May be repeated with different content.

4953. Public Personnel Administration 3(3-0)

Prerequisites: Six hours of political science.

An intensive examination of personnel administration in the public service including such topics as recruitment procedures, classification systems, promotion policies, and collective bargaining in a public merit system.

4973. Internship in Political Science 3 semester hours

Prerequisites: 12 hours of political science and approval of the department chair.

Field experience in selected government agencies. May be repeated with different content.

PSYCHOLOGY

George M. Diekhoff, Chair (O'Donohoe Hall 122)

Professors: Diekhoff, Vandehey

Associate Professors: Carlston, Guthrie

Assistant Professor: Spiller

Professor Emeritus: Cuevas

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

A major in psychology has the option of obtaining a Bachelor of Arts or a Bachelor of Science degree. Requirements for the B.A. and B.S. degrees are on page 93.

Program requirements remain the same for either degree and are as follows:

Major (34 semester hours)

PSYC 1103, 2203, 3303, 3314, 3603 or 4203, 3703 or 4003, 4503 or 4703; and 12 advanced hours, selected with the approval of the student's advisor.

BIOL 1134 or 1144 (satisfies part of Natural Science requirement in Academic Foundations and Core Curriculum) is an additional program requirement.

All Psychology majors must complete a minor of at least 18 semester hours of which at least 6 must be advanced. The minor field selected must be acceptable to the chairs of major and minor programs.

Admission into the Undergraduate Psychology Major

Any student wishing to declare a major in psychology must:

1. have completed the following courses (or equivalents) with a minimum GPA of 2.75: ENGL 1113, 1123, PSYC 1103, 2203, BIOL 1134 or 1144, and a college-level mathematics course; **or**
2. have completed at least 60 hours of college credits with a minimum cumulative GPA of 2.75;
3. complete a "Change of Degree/Major/Minor" form available in the Psychology Department Office (O'Donohoe Hall 122).

The Psychology Admissions Committee will review the application and notify the student as to his/her acceptance or non-acceptance into the major. If a student is accepted, an academic advisor will be assigned with whom the student should meet regularly. Students who have not been admitted to the psychology major should be advised by the Pre-Psychology advisor. Contact the Psychology Department for details.

All psychology majors must take a comprehensive examination during their senior year. Contact the Psychology Department office to make testing arrangements.

REQUIREMENTS FOR A MINOR IN PSYCHOLOGY

Eighteen semester hours including PSYC 1103 and 2203 plus 12 additional advanced hours chosen in consultation with the student's advisor and psychology faculty.

GRADUATE PROGRAM

The requirements for a degree of Master of Arts with a major in psychology may be found in a separate graduate catalog.

COURSES IN PSYCHOLOGY (PSYC)

1103. **General Psychology** (TCCNS = PSYC 2301) 3(3-0)
Introduction and survey of the basic concepts of psychology as a science of behavior and mental processes. Includes research and current information in the areas of learning, states of consciousness, human development, personality, and abnormal behavior.
2203. **Human Behavior** 3(3-0)
Prerequisite: PSYC 1103.
A continuation of the introductory examination of psychology. Topics include biological psychology, sensation and perception, motivation, emotion, industrial/organizational psychology, and social psychology.
3023. **Human Sexuality** 3(3-0)
Prerequisite: PSYC 1103. May also be taken for sociology credit.
Basic study of human sexual behavior. Topics to be covered include psycho-sexual development, sexual attitudes and information, ethics, sexual deviations, sexual problems, therapy, and current issues.
3233. **Developmental Psychology** 3(3-0)
Prerequisite: PSYC 1103 or consent of instructor.
A study in the development of behavior and mental processes across the life span. Includes normal and abnormal behavior. Also offered for nursing credit.
3303. **Writing in Psychology** 3(3-0)
Prerequisites: ENGL 1113, 1123, and PSYC 1103. Psychology majors only.
This is a writing-intensive course intended to provide training for psychology majors on the unique writing guidelines set forth by the American Psychological Association. This course will prepare psychology majors to meet writing expectations of subsequent upper-division courses and for continued academic and professional success. Includes work in library and database research methods.
3314. **Psychological Statistics** (formerly 3313) 4(4-0)
Prerequisite: MATH 1003 or equivalent.
Introduction to descriptive and inferential statistics. Topics include data distributions, descriptive statistics, the standard normal distribution, interval estimation, one- and two-sample significant difference tests, one-way analysis of variance, factorial analysis of variance, correlation, and regression. Computerized statistical analysis is covered in a required, concurrent laboratory.
3403. **Social Psychology** 3(3-0)
Prerequisites: PSYC 1103, 2203. May also be taken for sociology credit.

Interdisciplinary experimental research linking psychology and sociology, which deals with the influence of groups and social situations on the individual. Includes as areas of study: social and person perception, intragroup and intergroup relations, attitudes and attitude change, conformity, prejudice, leadership, and power structures.

3603. Abnormal Psychology 3(3-0)

Prerequisites: PSYC 1103, 2203.

Historical views of mental disorders; the problems of identifying and classifying deviant behavior; current research concerning the background, development, symptoms, dynamics, and prognosis of the major categories of mental disorders.

3703. Theories of Motivation 3(3-0)

Prerequisites: PSYC 1103, 2203.

An examination of the concepts of needs, drives, and motives as they contribute to human behavior. Motivational processes are examined ranging from the primary, physiological drives, to higher-order motives like achievement, curiosity, and cognitive consistency.

3853. Health Psychology 3(3-0)

Prerequisites: PSYC 1103, 2203.

An examination of the contributions of psychology to the promotion and maintenance of health, the prevention and treatment of illness, and the improvement of the health care system and health policy formulation. Topics include the mind-body relationship, health-enhancing and health-compromising behaviors, stress and coping, patient-practitioner interaction, pain management, and psychological issues in chronic and terminal illnesses.

3913. Personal Relations and Interactions 3(3-0)

Prerequisites: PSYC 1103, 2203 or consent of instructor.

Learning and practice in personal and interpersonal skills. Emphasis is upon experiential role playing and practice in expression, listening, constructive confrontation, resolving conflicts, negotiation, and stress management.

4003. Learning 3(3-0)

Prerequisites: PSYC 1103, 2203.

Scientific research in learning processes; methods and techniques of collecting data on learning; the application of learning procedures to normal and abnormal behavior.

4103. Clinical Psychology 3(3-0)

Prerequisites: PSYC 1103, 2203, 3603.

A critical evaluation of the major theories and methods of psychological treatment and assessment.

4113. Industrial/Organizational Psychology 3(3-0)

Prerequisites: PSYC 1103, 2203 or consent of instructor.

Psychological theories and psychometric principles as applied to the selection, training, and evaluation of workers, worker motivation and job satisfaction, the employee-employer relationship, and consumer psychology.

4123. History and Systems of Psychology 3(3-0)

Prerequisites: 12 hours of psychology including 1103, 2203.

A survey of the historical development of psychology. Important schools of psychology, major contributors, and the shaping influence of the past on contemporary psychology are all considered.

4133. Perception and Cognition 3(3-0)

Prerequisites: PSYC 1103, 2203.

The study of the human being as an information processing system. Topics include sensory aspects of information extraction, selective attention and concentration, perception and recognition of incoming stimulation, and the structures and processes of human memory systems.

4143. Psychology of Self 3(3-0)

Prerequisites: PSYC 1103, 2203.

This high participation seminar is designed for junior and senior students. The course provides an opportunity for students to understand the *self* from an intrapersonal perspective. Concepts such as self-esteem, self-concept, and self-fulfilling prophecies will be discussed. Some self-disclosure is consistent with this seminar format.

4153. Child Clinical Psychology 3(3-0)

Prerequisites: PSYC 1103 and 2203 or consent of instructor.

Introduction to clinical disorders observed in children and adolescents. Course covers concepts of developmental psychopathology and the etiology of disorders. Discussion of the assessment, diagnosis, and treatment of psychological disorders experienced by children and adolescents from a system of care perspective.

4203. Psychology of Personality 3(3-0)

Prerequisites: PSYC 1103, 2203.

A survey of the major theories of personality development and functioning, including an introduction to personality assessment and current research.

4213. Social Cognition 3(3-0)

Prerequisites: PSYC 1103, 2203.

A survey of the theories and findings of the field of social cognition, which examines how and what we think about ourselves and other people. This course will focus on the cognitive processes that allow humans to construct a meaningful social reality, with emphasis on the way social information is processed, storied, and used.

4303. Critical Thinking in Psychology 3(3-0)

Prerequisites: PSYC 1103, 2203.

Introduction to the process of critical thinking, and the application of this process to some of the more interesting and controversial topics in psychology. Content areas include cognitive biases and distortions, influence techniques, logical fallacies, propaganda, and analysis of psychology research.

4401, 4402, 4403. Independent Study in Psychology 1-3 semester hours

Prerequisites: PSYC 1103 and consent of instructor.

Intensive study for the advanced student within a special area. May be repeated for credit for a different area of study.

4503. Psychological Tests and Evaluation 3(3-0)

Prerequisites: PSYC 1103, 2203, 3303, and 3314.

The basic principles of psychological evaluation, test construction, and administration. Includes a survey of current intelligence, interest, aptitude, and personality tests and their evaluation.

4703. **Research Methods in Psychology** 3(3-0)
 Prerequisites: 12 hours of psychology including PSYC 3303 and 3314.
 An introduction to descriptive and experimental designs used in the study of behavior. Course content emphasizes the evaluation of research, developing research questions and hypotheses, research ethics, psychological measurement, basic data analysis, and research report writing.
4773. **Special Topics in Psychology** 3(3-0)
 Prerequisites: PSYC 1103, 2203.
 Intensive study and coverage of selected topics in psychology. May be repeated for credit when topics vary.
4801. **Senior Thesis I** 1 semester hour
 Prerequisites: PSYC 3314, 4703, must be a psychology major and have approval of department chair.
 Outstanding students that receive department approval may undertake a research project for credit. The research project is expected to take two semesters to complete (register for 4801 first semester and 4802 the second semester). Summation of the project will include an oral presentation to the faculty and interested students. Ideally, the student will submit the findings to a regional or national conference or a refereed journal.
4802. **Senior Thesis II** 2 semester hours
 Prerequisites: PSYC 4801 and approval of department chair.
 Completion of the senior thesis begun as PSYC 4801. Summation of the project will include an oral presentation to the faculty and interested students. Ideally, the student will submit the findings to a regional or national conference or a refereed journal.
4903. **Internship in Psychology** 3(3-0)
 Prerequisites: Open only to psychology majors. The student must have completed 21 hours of psychology and must be approved by the course instructor.
 Field experience in selected agencies.

SOCIAL STUDIES

The Prothro-Yeager College of Humanities and Social Sciences offers a social studies course that is limited to students who are pursuing their teacher certification with a Bachelor of Science in Interdisciplinary Studies or a Bachelor of Arts with Secondary Certification. (See pages 141 and 147 for degree requirements.)

COURSE IN SOCIAL STUDIES (SOST)

3003. **Concepts of Social Studies** 3(3-0)
 This course explores critical concepts and themes that have charted the course of human development. Emphasis shall be given to the major political, social, economic, religious, geographic, scientific, and cultural forces that have shaped civilizations around the globe.

SOCIOLOGY

Beverly L. Stiles, Chair (O'Donohoe Hall 122)

Professors: Clark, LaBeff, Stiles, Williams

Assistant Professor: Packard

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

A student majoring in sociology has the option of obtaining a Bachelor of Arts or a Bachelor of Science degree. Requirements for the B.A. and B.S. degrees are on page 93.

Major (B.A. and B.S.) (33 semester hours)

SOCL 1133, 2233, 3633, 4153, 4803, PSYC 3314, and 15 advanced semester hours selected with the approval of the student's advisor.

All sociology majors must take a written comprehensive examination during their senior year. Contact the Sociology Department office to make testing arrangements.

All Sociology majors must complete a minor of at least 18 semester hours of which at least six must be advanced. The minor field selected must be acceptable to the chairs of major and minor programs.

REQUIREMENTS FOR A MINOR IN SOCIOLOGY

Eighteen semester hours including SOCL 1133, 2233, plus 12 additional advanced semester hours.

COURSES IN SOCIOLOGY (SOCL)

1133. **Introductory Sociology** (TCCNS = SOCI 1301) 3(3-0)
 A general survey course introducing students to the field of sociology. Emphasis is on people as products of groups, social interaction, and social forces. Topics covered include marriage and family, deviance, social class, minority relations, and collective behavior with an effort toward helping students understand the social world and their roles in it. May be counted toward degree requirements for sociology or social work, but not both.
2233. **Social Problems** (TCCNS = SOCI 1306) 3(3-0)
 Prerequisite: SOCL 1133 or consent of instructor.
 Such issues as poverty, social class, race, family, and aging are examined to determine causes and possible solutions.
3023. **Human Sexuality** 3(3-0)
 Prerequisite: SOCL 1133.
 For course description see psychology section. May be taken for either psychology or sociology credit, but not for both.
3103. **The Consumer Society** 3(3-0)
 Prerequisites: SOCL 1133 and 2233.
 An examination of various aspects of consumerism in American society. Emphasis is

placed on the promotion of consumption through the media and advertising, credit card debt, commercialization of childhood by corporations, as well as cultural change and activism.

3333. Criminology 3(3-0)

Prerequisite: SOCL 1133 or consent of instructor.

An in-depth study of crime in the United States with an emphasis on major types of crime and factors in causation.

3353. Total Institutions 3(3-0)

Prerequisites: SOCL 1133, 3333 or 3733 or consent of instructor.

A study of total institutions with a primary focus on contemporary American prisons. The historical development of total institutions and the major problems inherent in such institutions are examined in detail.

3403. Social Psychology 3(3-0)

Prerequisite: SOCL 1133.

For course description see psychology section. May be taken for either psychology or sociology credit, but not for both.

3433. The Family 3(3-0)

Prerequisite: SOCL 1133 or consent of instructor.

A broad conceptual analysis of the American family, with some cross-cultural comparisons. Specific areas covered include sexual norms, sex roles, gender issues, dating and courtship patterns, mate selection, family formation, marital adjustment, family dissolution as well as an analysis of major historical changes and trends.

3633. Research Methods 3(3-0)

Prerequisites: PSYC 3314, 9 hours of sociology, or consent of instructor.

An introduction to methods and techniques of sociological research; examination and application of quantitative and qualitative methods of data collection through selected research programs.

3703. The Sociology of Religion 3(3-0)

Prerequisites: SOCL 1133 and 2233.

An overview of the relationship between society and religion with a particular focus on modern developments (e.g., religious violence, new religious movements). The course builds on the strong foundations laid by early social theorists such as Max Weber and Emile Durkheim. Students will develop an understanding of both the religious landscape past and present and of the challenges and opportunities faced by researchers in the sociology of religion.

3733. Juvenile Delinquency 3(3-0)

Prerequisite: SOCL 1133 or consent of instructor. May also be taken for criminal justice credit.

Nature, extent, and causes of juvenile delinquency: youthful offenders and their career patterns, institutional controls and correctional programs.

3783. Population and World Cultures 3(3-0)

Prerequisites: SOCL 1133, 2233, or consent of instructor.

An examination of global population issues within the context of specific world cultures including the Middle East, the Pacific Rim, Asia, and Latin America.

3803. **Medical Sociology** 3(3-0)
 Prerequisite: SOCL 1133 or consent of instructor.
 Social factors and institutional settings for physical and mental health care; public needs and group medical services; women's health issues; social interaction in hospitalization and institutions of rehabilitation.
- 4001, 4003. **Independent Study in Sociology** 1, 3 semester hours
 Prerequisites: 9 hours of sociology including SOCL 1133 and consent of instructor.
 Intensive study for the advanced student within a special area in the field of sociology. May be repeated for credit for a different area of study.
4133. **Racial and Ethnic Relations** 3(3-0)
 Prerequisites: SOCL 1133, 2233, or consent of instructor.
 Critical analysis of some of the major issues on race in U.S. society (and across the world). Emphasis is placed on the theory of racial and ethnic adaptation patterns. We will develop a historical understanding and apply it to contemporary U.S. race relations. What does it mean to be Black, White, Latino, Asian, or mixed? What do these categories mean?
4153. **Sociological Theory** 3(3-0)
 Prerequisites: 9 hours of sociology or consent of instructor.
 A survey and analysis of development of sociological theory from the time of Comte to the present. Particular schools and major paradigms are evaluated, and recent confluences in social anthropology, sociology, and social psychology are noted.
4233. **Gender in Society** 3(3-0)
 Prerequisites: SOCL 1133 and 2233.
 Investigates the social organization of gender, especially interaction, cultural, and institutional arrangements that underlie gender inequality in American society.
4353. **The Sociology of Death and Dying** 3(3-0)
 Prerequisites: 9 hours of sociology or consent of instructor.
 An analysis of the social context of death and dying in American society. The impact of death on children, the family, and survivors is examined. Additional emphases on the role of hospice and on legal, moral, and medical ethics are included.
4413. **Deviance** 3(3-0)
 Prerequisites: SOCL1133, 2233 or consent of instructor.
 Understanding the occurrence of and reaction to deviant behavior in society. This course is a detailed review of the various forms of behavior which are often considered "deviant" in Western society using various theoretical explanations. Some topics include: white collar and corporate crime, drug addiction, alcoholism, suicide, and sexual deviance.
4633. **The Sociology of Family Violence** 3(3-0)
 Prerequisites: 9 hours of sociology or consent of instructor.
 An examination of the various forms of family violence including child, sibling, courtship, marital, and elder abuse. Specific theoretical models explaining family violence will be examined along with the societal characteristics associated with violent situations and the various therapeutic approaches and current treatment programs available.

4733. Special Topics in Sociology

3(3-0)

Prerequisites: 9 hours of sociology or consent of instructor.

Intensive study and coverage of selected topics in sociology. May be repeated for credit when topics vary.

4773. Internship in Sociology

3(3-0)

Prerequisites: 12 hours of sociology, major in sociology, and permission of the instructor.

Field experience in selected agencies. May not be repeated for credit.

4803. Applied Sociology

3(3-0)

Prerequisites: 9 hours of sociology or consent of instructor.

This course incorporates previous course work within the discipline to facilitate a student's ability to apply sociology and sociological concepts to problem-solving in the world of business and professional organizations. Students who are considering a career of professional development can explore the problem-solving skills necessary to the understanding of how issues that confront staff development such as race, social class, gender, and family impact the work environment.

4883, 4893. British Culture and Society

3(3-0)

Prerequisites: 3 hours of sociology and consent of instructor.

This class is part of MSU's study abroad program offered during the second summer term. The class compares major institutions within Great Britain and the United States. Institutional issues surrounding the family, government, religion, poverty, education, and sport will provide the context by which students can examine modern living in the U. K. as well as the U.S.



COLLEGE OF SCIENCE AND MATHEMATICS

Lynn Little, Dean (Bolin Hall 111A)

MISSION STATEMENT FOR THE COLLEGE OF SCIENCE AND MATHEMATICS

The College of Science and Mathematics has as its major mission teaching of the highest quality at both the undergraduate and graduate levels. The college offers 8 undergraduate degrees: biology, chemistry, clinical laboratory science, computer science, geosciences, mathematics, mechanical engineering, and physics. Master's degrees are offered in biology and computer science. The college has well-educated faculty members who are excellent teachers and professionals in their disciplines.

Through its faculty and programs, the College of Science and Mathematics provides students with the knowledge and skills for life-long learning, the ability to understand the world in which they live, and the means to comprehend engineering, mathematical, and scientific advancements and their benefit to future generations. To further assist in the accomplishment of this mission, the College of Science and Mathematics fosters research and scholarship of high quality among the faculty, undergraduate, and graduate programs. To provide outreach as an educational institution, the College of Science and Mathematics assists its faculty in utilizing its expertise to the benefit of the university community and regional, state, national, and international communities.

The College of Science and Mathematics offers the following degrees:

Bachelor of Arts with majors in:

Computer Science..... see page 337
 Mathematics see page 346

Bachelor of Science with majors in:

Biology see page 319
 Chemistry see page 325
 Computer Science..... see page 337
 Geosciences see page 330
 Mathematics see page 346
 Physics..... see page 334

Bachelor of Science in:

Clinical Laboratory Science see page 336
 Mechanical Engineering see page 351
 Dental Early Acceptance Program (DEAP)..... see page 342
 Teacher Certification programs for Grades 8 - 12 in Composite
 Science, Life Science, and Mathematics..... see page 149

Master of Science with majors in:

Biology see graduate catalog
 Computer Science..... see graduate catalog

BIOLOGY

William B. Cook, Chair (Bolin Hall 218D)

Professors: Cook, Rincón-Zachary

Associate Professors: Shipley, Vogtsberger

Assistant Professors: Masuoka, Mills, Scales

Instructor: Javed

Professors Emeriti: Grimes, Horner, Scott, Stangl

MISSION STATEMENT FOR THE DEPARTMENT OF BIOLOGY

The mission of the Department of Biology is to prepare its graduates to participate in scientific endeavors in a productive and ethical manner. Faculty are committed to providing a strong education in the fundamental principles of biology and training in basic field and laboratory research methods and analytical techniques. The Department of Biology presents students with a coherent perspective of the living world they inhabit in a learning environment founded on a broad-based curriculum fostered by a supportive and collaborative faculty and staff. Collectively we engender and nourish life-long learning and encourage service to the university and the broader community.

The requirements for the degree of Bachelor of Science with a major in biology may be satisfied in any of four areas of emphasis.

- A. Molecular-cellular option
- B. Organismal option
- C. Pre-Professional I (pre-medicine, pre-dentistry, pre-veterinary) option
- D. Pre-Professional II (pre-physical therapy) option

General (see page 89)

Academic Foundations and Core Curriculum (all options see page 91)

Major

Option A

Biology 1144, 1544, 3054, 3064, 3334, 4001, 4714 or 4231 and 4233, 3 advanced hours in both botany¹ and zoology²; 3 additional advanced hours (34 hours)

Option B

Biology 1144, 1544, 3054, 3064, 3113 or 3044, 3334, 4001, 4143, 4684; 3 advanced hours in both botany¹ and zoology²; 12 additional advanced hours (49-50 hours)

Option C

Biology 1144, 1544, 3054, 3064, 3144, 3234, 3334, 4001; 8 additional advanced hours (37 hours)

Option D

Biology 1144, 1544, 3054, 3064, 3334, 4001; 3 advanced hours in both botany¹ and zoology²; 12 additional advanced hours (39 hours)

¹Advanced Botany 3534, 4463, and 4564.

²Advanced Zoology 3024, 3033, 3133, 3234, 3344, 3434, 3644, and 4524.

Program Requirements (see Options, above)

- Option A: CHEM 1141, 1143, 1241, 1243, 2001, 2003, 2011, 2013, 3603, 4243;
MATH 1433 or 1534, 1634, 1734, 2534; PHYS 1624, 2644
- Option B: CHEM 1141, 1143, 1241, 1243, 2001, 2003; MATH 1433;
PHYS 1144, 1244; STAT 3573 or PSYC 3314
- Option C: CHEM 1141, 1143, 1241, 1243, 2001, 2003, 2011, 2013, 4243, 4253;
MATH 1433 or 1534, 1634; PHYS 1144, 1244; STAT 3573
- Option D: CHEM 1141, 1143, 1241, 1243, 2001, 2003; MATH 1433;
PHYS 1144, 1244; STAT 3573 or PSYC 3314; PSYC 2203, 3233, 3603

Foreign Language 1134 and 1234 are required for options A-D.

REQUIREMENTS FOR A MINOR IN BIOLOGY (20 semester hours)

Biology 1144, 1544, 3104 (or 3334 with permission of instructor), and an additional 8 semester hours, of which 3 must be advanced. Courses must be selected in consultation with chair.

COURSES IN BIOLOGY (BIOL)

1134. **Anatomy and Physiology I** (TCCNS = BIOL 2401) 4(3-2)
Structure and function of the human body. Anatomical terminology, chemical and cellular basis of life, tissues, the integumentary, skeletal, muscular, and nervous systems, including sense organs. Concurrent laboratory participation with animal dissection required.
1144. **General Zoology** (TCCNS = BIOL 1413) 4(3-2)
Survey of the animal world emphasizing the morphology, life cycles, and distribution of major phyla. Dissection of representative animals.
1234. **Anatomy and Physiology II** (TCCNS = BIOL 2402) 4(3-2)
Prerequisite: BIOL 1134 with a grade of C or better.
Structure and function of the endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive systems of humans. Concurrent laboratory participation with animal dissection required.
1333. **Nutrition** (TCCNS = BIOL 1322) 3(3-0)
Prerequisite: CHEM 1303 recommended.
A study of the chemical character, metabolism, and nutritional quality of common foods. Emphasis will be placed on the relationship of nutritional health to overall well being of individuals and society. Limited to students majoring in the allied health sciences.
1544. **General Botany** (TCCNS = BIOL 1411) 4(3-2)
An introduction to the plant world including structure and physiology of flowering plants, survey of plant diversity and ecological roles of plants.
2144. **Microbiology** (formerly 3004) (TCCNS = BIOL 2420) 4(3-3)
Prerequisites: BIOL 1134, 1234, and CHEM 1303.
Introduction to the study of medically important bacteria, protozoa, viruses, helminths, and fungi. May not be applied to biology major.

3003. **Introduction to Clinical Laboratory Science** (formerly 1113) 3(2-2)
Prerequisites: BIOL 1234, 2144, CHEM 1241, 1243, and permission of instructor.
Prepares students in the CLSC program for clinical training. Introduction to medical technologies, professional ethics, and the major disciplines in clinical laboratory sciences. Basic laboratory procedures and correlation of test results with common disease states.
3024. **Vertebrate Zoology** 4(3-2)
Prerequisites: BIOL 1144 and 1544.
Survey of the zoogeography, systematics, and natural history of fishes, amphibians, reptiles, birds, and mammals. Emphasis on Texas species. Field trips required.
3033. **Field Zoology** 3(1-4)
Prerequisites: BIOL 1144, 1544, and consent of instructor.
Introduction to vertebrate field studies, involving data recording and collection/preservation of study specimens. Emphasis on non-game species of mammals. Field trips required. Valid Texas hunting license required.
3044. **Bacteriology** 4(3-3)
Prerequisites: BIOL 3054, 3064.
Study of prokaryotic cell structure and function, bioenergetics, and regulation of cellular functions; survey of adaptations to diverse environments.
3054. **Principles of Biology I** 4(3-3)
Prerequisites: BIOL 1144 and 1544; one year General Chemistry or concurrent enrollment.
A study of the cellular basis of life, principles of inheritance, and principles of evolution.
3064. **Principles of Biology II** 4(3-3)
Prerequisite: BIOL 3054.
A survey of the diversity of living organisms; a consideration of structures and functions unique to plants; an overview of mammalian systems and processes; an examination of ecological interactions among living organisms.
3104. **Fundamental Genetics** 4(3-2)
Prerequisites: One year of biology.
Principles of Mendelian inheritance. Introduction to the molecular basis of genetics. Application of genetic principles to agricultural, medical, and evolutionary questions. May not be applied to biology major.
3113. **Biogeography** 3(3-0)
Prerequisites: BIOL 1144, 1544 and either BIOL 3054 or 3104.
Study of the biological and physical factors which influence the present and historical distribution patterns of plants and animals.
3133. **Wildlife Management** 3(3-0)
Prerequisites: One year of biology.
Recognition, distribution, and importance of game birds, mammals, and fish of the United States. Principles of management of wildlife resources. The commercial freshwater fishery and fur industry. Non-game wildlife.

3144. **Physiology** 4(3-3)
Prerequisites: BIOL 3054, 3064; CHEM 2001 and 2003; BIOL 3234 and 3334 recommended.
General principles of physiology including the functional analysis of the nervous, muscular, cardiovascular, endocrine, digestive, and respiratory systems.
3234. **Comparative Anatomy of the Vertebrates** 4(3-3)
Prerequisites: One year of biology; BIOL 3064 recommended.
Organ systems of chordates considered in relation to each other with emphasis on mammalian groups. Dissection of representative animals.
3334. **Genetics** 4(3-3)
Prerequisite: BIOL 3054.
Principles of genetics and their application to living organisms; illustrated in laboratory exercises using plant and animal model systems.
3344. **Developmental Biology** (formerly 3343) 4(3-3)
Prerequisites: BIOL 3054, 3064, and 3334.
Embryogenesis, including fertilization, embryonic patterning, and organogenesis, emphasizing molecular mechanisms. Laboratory overview of classical embryology, introduction to current techniques, and survey of primary literature.
3434. **Entomology** 4(2-4)
Prerequisites: One year of biology.
Principles of insect life. Classification, life histories, and economic relations.
3534. **Systematic Botany** 4(2-4)
Prerequisite: BIOL 1544 or equivalent.
Identification and taxonomic classification of plants using local flora as examples. Survey of major plant families indigenous to North America.
3644. **Invertebrate Zoology** (formerly 3643) 4(3-3)
Prerequisites: One year of biology.
A survey of the structure, function, systematics, and habitats of the protist and invertebrate phyla.
3993. **Practicum** 3(0-3)
Application of basic principles of biology in a professional field or research setting. Credit/no credit only. May not be applied to biology major.
4001. **Seminar in Biology** 1(1-0)
Prerequisite: Restricted to senior biology or general science majors.
Recent advances in the biological sciences.
4021. **Immunology Laboratory** 1(0-3)
Prerequisite: Credit or concurrent enrollment in BIOL 4023.
Microscopic, molecular, and serological techniques of basic and clinical immunology.

4023. **Immunology** 3(3-0)
Prerequisites: BIOL 3054, 3064.
Fundamentals of cellular and molecular immunology: structure, function, and genetics of the immune system; regulation of humoral and cell-mediated responses; role of the immune system in human disease.
4033. **Herpetology** 3(2-3)
Prerequisites: One year of biology and permission of instructor.
Taxonomy, ecology, and behavior of amphibians and reptiles with emphasis on local forms. Field trips required.
4043. **Human Genetics** 3(3-0)
Prerequisites: BIOL 3144, 3334; CHEM 2011, 2013.
Principles of genetics as applied to human beings. Special reference to causation of heritable disorders and to gene flow in populations.
4143. **Evolution and Systematics** 3(3-0)
Prerequisites: BIOL 3054, 3064, and 3334.
Study of organic evolutionary processes, including mutations, genetic drift, patterns and rates of change, and how this knowledge is used to determine systematic relationships of taxa.
4231. **Molecular Biology Laboratory** 1(0-3)
Prerequisite: Concurrent enrollment in BIOL 4233.
Laboratory experience in the practices of genetic engineering.
4233. **Molecular Biology** 3(3-0)
Prerequisites: BIOL 3334, CHEM 2011, 2013; CHEM 4243 recommended.
Structure and function of nucleic acids in the storage, transmission, and expression of genetic information. Proteins as the primary structural and catalytic agents of cellular and organismal biology. Prokaryotic, eukaryotic, and viral model systems. Principles of genetic engineering.
4444. **Histology** (formerly 4443) 4(3-3)
Prerequisites: One year of biology.
Cytology and histology of epithelium, connective tissue, muscular tissue, nerve tissue, and organology.
4463. **Plant Anatomy** 3(1-4)
Prerequisites: BIOL 1544, 3054.
Examination of cells and tissues of the plant body. Primary and secondary tissues; reproductive structures; sporogenesis, gametogenesis, and embryogenesis; secretory structures; ecological plant anatomy.
4524. **Animal Parasitology** (formerly 4523) 4(3-3)
Prerequisites: One year of biology.
Host-parasite relationships in representative groups, with emphasis on taxonomic, ecological, and preventive aspects.

4564. Plant Physiology 4(3-3)

Prerequisites: BIOL 3054, 3064, and CHEM 2003.

Study of physiological process in higher plants. Dormancy, germination; transport; mineral nutrition; hormones; tropic responses; photosynthesis; nitrogen fixation; flowering; senescence and abscission.

4684. Ecology 4(3-3)

Prerequisites: One year of biology, MATH 1233; BIOL 3534 recommended.

Biomes; the physical environment; energy flow in ecosystems; population structure and dynamics; growth, distribution, dispersal patterns; species interactions; community structure; theories of diversity; succession.

4693. Tropical Rainforest Ecology 3 semester hours

An introduction to the neotropical rainforest which includes topics on biodiversity of plants and animals, climate, deforestation and conservation, ecotourism, and other pertinent topics. An organized 10-14 day field trip to a neotropical rainforest is required.

4714. Cell Biology 4(3-3)

Prerequisites: BIOL 3054, 3064, and 3334 or consent of instructor.

Organization, structure, function, and evolution of eukaryotic cells; intermediary metabolism and biosynthesis; membrane composition, function and synthesis; cytoskeleton structure and function; signal transduction; regulation of the cell cycle; programmed cell death; gene function and regulation; growth and reproduction.

4900. Research Orientation

Prerequisites: Consent of the instructor and department chair.

An introduction to research topics and methods.

4911, 4912, 4913. Independent Study 1-3 semester hours

Prerequisite: A written proposal must be approved by the department chair prior to registration. (Also see prerequisites on page 74.)

Directed research and study in specialized areas of biology. A minimum of 45 laboratory and/or field hours with supporting literature review is required per semester credit hour.

SCIENCE

The Department of Biology also offers a course under the designation of science.

COURSE IN SCIENCE (SCIE)

4900. Research Orientation

Prerequisites: Admission into the Undergraduate Research Opportunity and Summer Workshop (UGROW).

An introduction to research topics and methodologies in the basic and applied sciences.

DEPARTMENT OF CHEMISTRY, GEOSCIENCES AND PHYSICS

Rodney Cate, Chair (Bolin Hall 307B)

CHEMISTRY

Professors: Cate, Rogers

Associate Professors: Hallford, Hansen, Shao

Assistant Professor: Fulton

Professor Emeritus: Sund

MISSION STATEMENT FOR THE CHEMISTRY PROGRAM

The mission of the Chemistry Program is to prepare students for graduate study or employment in a vast array of chemically-related fields. The courses are designed to provide a strong knowledge and skills-based foundation for pursuing advanced degrees in the chemical sciences or such health related fields as human and veterinary medicine, dentistry, and pharmacy.

Programs of study leading to the degree of Bachelor of Science with a major in chemistry are as follows:

A. Professional option.

This program provides the academic foundation for students who may wish to continue their studies in graduate chemistry, chemical engineering, or biochemistry. Students completing this program with 3 additional advanced chemistry hours and a chemistry GPA of 2.5 or better will be certified by the Committee on Professional Training of the American Chemical Society.

B. Interdisciplinary option.

This program provides the academic foundation for students who may wish to continue their studies in professional schools of medicine, dentistry, or veterinary medicine or those who desire an emphasis in business, computer science, or other areas.

The requirements for the degree of Bachelor of Science with a major in chemistry are as follows:

General: (see page 89)

Academic Foundations and Core Curriculum: (see page 91)

Bachelor of Science: (see page 93)

Major

Option A, ACS Certification

CHEM 1141, 1143, 1241, 1243, 1253, 2001, 2003, 2011, 2013, 3305, 3405, 3603, 3705, 4243, 4305, two hours of 4001, MATH 2603 (Math for Thermodynamics). One additional advanced laboratory hour in chemistry is required, exclusive of 3504 and 4505. (Those students who wish to continue their studies in graduate biochemistry should take CHEM 4242 and 4253.)

American Chemical Society Certification--With Honors

This designation will be awarded to students fulfilling the following:

1. All regular requirements for the Bachelor of Science with a major in chemistry (Option A) and all the requirements for certification by the Committee on Professional Training of the American Chemical Society.
2. Minimum GPA: 3.0 overall; 3.3 in chemistry courses.
3. A minimum of 4 semester hours must be earned in independent research (CHEM 4911, 4922, 4933); this should be commenced in the junior year or earlier.
4. Acceptance of a B.S. research paper (covering the undergraduate independent research project) by the chemistry faculty and the chair of the Honors Committee.
5. Presentation of a public lecture on the research paper to the chemistry faculty.

Option B

CHEM 1141, 1143, 1241, 1243, 2001, 2003, 2011, 2013, 3305, 3603, two hours of 4001, MATH 2603 (Math for Thermodynamics), and either CHEM 3405 or 4242 and 4243 or 3705 or 3504 and 4505.

Optional Minor**Option A**

Professional Chemistry or Prechemical Engineering:

Mathematics (See page 346 and the Chemistry Program Advisor for specific course requirements.) OR

Physics (see page 334 and the Chemistry Program Advisor for specific course requirements); OR

Other (see the Chemistry Program Advisor for specific course requirements); OR

Professional Biochemistry - Biology (See page 319 and the Chemistry Program Advisor for specific course requirements.)

Option B

Pre-Medical, Pre-Dental or Pre-Veterinary - Biology (See page 319 and the Health Professions Advisor for specific course requirements.); OR

Business Emphasis - Business Administration (See page 108.); OR

Computer Science Emphasis - Computer Science (See page 337.)

Others (See your academic advisor.)

Additional Requirements:

Requirements common to both optional degree plans:

MATH 1233 and 1433 or MATH 1534; MATH 1634 and 1734; MATH 2603; PHYS 1624 and 2644; and one year of a foreign language. (MATH 2603 – Math for Thermodynamics must be completed in the spring before Physical Chemistry I.)

Option A

MATH 2534

Option B

See the Health Professions Advisor for additional Pre-Veterinary medical requirements.

Electives

Additional hours to total a minimum of 122 (including exercise physiology requirements).

REQUIREMENTS FOR A MINOR IN CHEMISTRY (22 semester hours)

CHEM 1141, 1143, 1241, 1243, and 14 additional hours of which 6 must be advanced, exclusive of introductory environmental chemistry.

Special Problems in CHEM 4911, 4922, 4933 may not be counted toward the minor in chemistry.

COURSES IN CHEMISTRY (CHEM)

1101. **Introductory Chemistry Laboratory** (TCCNS = CHEM 1105) 1(0-2)
Prerequisite: Credit or concurrent enrollment in CHEM 1103.
Laboratory experiments and demonstrations to accompany CHEM 1103.
1103. **Introductory Chemistry (Essentials of Chemistry)** 3(3-0)
(TCCNS = CHEM 1305)
Prerequisite: MATH 1003, math THEA score of 270, math Accuplacer score of 90, or satisfactory score on placement exam.
Recommended for students majoring in business, criminal justice, education, or liberal arts. An introduction to chemical principles and concepts. Allied health science majors should take CHEM 1303.
1141. **General Chemistry Laboratory** (TCCNS = CHEM 1111) 1(1-3)
Prerequisite: Concurrent enrollment in CHEM 1143.
Basic laboratory practice in chemistry.
1143. **General Chemistry** (TCCNS = CHEM 1311) 3(3-0)
Prerequisite: Credit or concurrent enrollment in MATH 1233 or 1534.
Atomic and molecular structure, periodic law, states of matter, reactions.
1241. **General Chemistry Laboratory** (TCCNS = CHEM 1112) 1(1-3)
Prerequisites: CHEM 1141 and concurrent enrollment in CHEM 1243.
Qualitative and quantitative analysis.
1243. **General Chemistry** (TCCNS = CHEM 1312) 3(3-0)
Prerequisites: CHEM 1143 and MATH 1233 or 1534.
Solutions, chemical thermodynamics, equilibrium, electrochemistry, and kinetics.
1253. **Descriptive Inorganic Chemistry** 3(3-0)
Prerequisite: CHEM 1143.
Quantum and symmetry elements of periodicity and bonding, acid-base theory, descriptive transition metal chemistry and organometallic chemistry.

1303. **General-Organic-Biological Chemistry** (formerly 1203) 3(3-0)
(TCCNS = CHEM 1306)
Prerequisite: MATH 1003, math THEA score of 270, math Accuplacer score of 90, or satisfactory score on placement exam.
An introduction to general, organic, and biological chemistry for the allied health sciences.
2001. **Organic Chemistry Laboratory** (formerly 3001) (TCCNS = CHEM 2123) 1(1-3)
Prerequisites: CHEM 1241 and concurrent enrollment in CHEM 2003.
Laboratory experiments to accompany CHEM 2003. Separation and purification techniques and quantitative methods in organic chemistry. An introduction to organic synthesis.
2003. **Organic Chemistry** (formerly 3003) (TCCNS = CHEM 2323) 3(3-0)
Prerequisite: CHEM 1243 with a grade of C or better.
A comprehensive study of the physical and chemical characteristics of compounds of carbon. Reaction mechanisms, synthesis, and reactions of hydrocarbons, alkyl halides, and alcohols.
2011. **Organic Chemistry Laboratory** (formerly 3011) (TCCNS = CHEM 2125) 1(1-3)
Prerequisites: CHEM 2001 and concurrent enrollment in CHEM 2013.
Laboratory experiments to accompany CHEM 2013. Methods of organic synthesis, qualitative analysis, and spectroscopic techniques.
2013. **Organic Chemistry** (formerly 3013) (TCCNS = CHEM 2325) 3(3-0)
Prerequisite: CHEM 2003 with a grade of C or better recommended.
A continuation of CHEM 2003. Includes properties, synthesis, and reactions of aldehydes, ketones, amines, carboxylic acids, and derivatives, multi-functional, and aryl compounds. Spectroscopy of organic compounds.
3305. **Analytical Chemistry I** 5(3-4)
Prerequisites: CHEM 1241 and 1243.
Theory and laboratory applications of methods of quantitative analysis. Topics include statistical analysis of data, gravimetric analysis, volumetric analysis, potentiometry, basic electrochemistry, spectroscopy, and analytical separations.
3405. **Analytical Chemistry II** 5(3-4)
Prerequisite: CHEM 3305.
Theory and laboratory applications of modern instrumental methods of analysis. Topics include signal processing, advanced spectroscopy, mass spectrometry, electroanalysis, chromatography, and electrophoresis.
3504. **Introductory Environmental Chemistry** 4(3-3)
Prerequisites: CHEM 1241 and 1243.
A systematic study of the important chemical principles applicable to environmental systems, including considerations of the sources, detection, treatment and prevention of air, water, and soil pollution.
3603. **Physical Chemistry I** 3(3-0)
Prerequisites: CHEM 1241, 1243; MATH 1734, 2603; PHYS 1624 and 2644 or consent of instructor.
Classical and statistical thermodynamics, kinetic molecular theory and chemical kinetics.

3705. **Physical Chemistry II** 5(3-4)
Prerequisites: CHEM 3405, 3603, and credit or concurrent enrollment in MATH 2534.
Atomic and molecular structure, experimental physical methods, spectroscopy, theory of reaction rates, and physical chemistry laboratory practice.
4001. **Seminar** 1 semester hour
Prerequisites: 6 advanced hours in chemistry. May not be counted toward the minor in chemistry. (See chemistry advisor for details.)
Participation in seminar presentations and discussions.
4133. **Advanced Organic Chemistry** 3(3-0)
Prerequisite: CHEM 2013.
Reaction mechanisms, structure elucidation, stereoisomerism, and conformational analysis.
4233. **Molecular Biology** 3(3-0)
(Same as BIOL 4233, page 323.)
4242. **Biochemistry Laboratory** 2(0-4)
Prerequisites: CHEM 2011 and credit or concurrent enrollment in CHEM 4243.
Experimental methods in biochemistry, including quantitative and qualitative techniques, enzyme kinetics, and separation methods for biomolecules.
4243. **Biochemistry** 3(3-0)
Prerequisite: CHEM 2013.
The structures and properties of biomolecules, enzyme kinetics and mechanism of action, and metabolic energy-yielding pathways.
4253. **Biochemistry** 3(3-0)
Prerequisite: CHEM 4243.
Oxidative phosphorylation, intermediary metabolism, membrane transport, hormone action, replication, transcription, and translation of genetic information.
4305. **Advanced Inorganic Chemistry** 5(3-4)
Prerequisites: CHEM 1253, 3405 and 3705 (may be concurrent).
A systematic study of the basic principles applicable to inorganic chemistry and the chemistry of selected main group elements, transition metal complexes, organometallic compounds, bioinorganic systems, and inorganic chemistry laboratory practice.
4353. **Quantum Physics** 3(3-0)
(Same as PHYS 4353, page 336.)
4505. **Environmental Chemical Technology** 5(3-4)
Prerequisites: CHEM 3305 and 3504.
A survey of chemical principles applicable to the properties and toxicology of hazardous wastes, and prevention and pretreatment strategies for pollution sources, and instruction in advanced techniques in environmental chemical analysis.
4900. **Independent Study**
Prerequisites: Consent of the instructor and department chair.
An introduction to research topics and methods.

4911, 4922, 4933. **Independent Study in Chemistry** 1-3 semester hours

Prerequisites: CHEM 4900; consent of instructor and department chair. See independent study restrictions in general information section of catalog.

Directed chemical research in problems of interest to the student and instructor. Minimum of 54 hours of laboratory work per semester hour credit. Requires a formal written research report. May not be counted toward the minor in chemistry.

4941, 4942, 4943. **Chemical Topics** 1-3 semester hours

Prerequisites: Consent of the instructor and junior standing.

Advanced topics in chemistry selected according to interests and needs of students.

GEOSCIENCES

Associate Professor: Dodge

Assistant Professor: Price

Professor Emeritus: Kocurko

MISSION STATEMENT FOR THE GEOSCIENCES PROGRAM

The Geosciences Program provides students with a comprehensive education that prepares them for a variety of employment opportunities as well as graduate school. Degrees incorporate field and classroom experience, with courses that offer the most current technology, information, and research techniques available. Students graduate with skills that enable them to utilize equipment, think critically, and interact effectively.

The requirements for the degree of **Bachelor of Science Degree with a major in Geosciences** may be satisfied through either the Environmental Science track or the Geosciences track.

General: (see page 89)

Academic Foundations and Core Curriculum: (see page 91)

Bachelor of Science: (see page 93)

ENVIRONMENTAL SCIENCE TRACK

Major:

Interdisciplinary - ENSC 1114, 3103, 4103; BIOL 1144, 1544, 3104; CHEM 1141, 1143, 1241, 1243, 3504; GEOS 1134, 3634, 4001.

Options (must choose one):

Option A – Biology: BIOL 3133, 3534, 4684, plus 7 additional hours

Option B – Chemistry: CHEM 3305, 4505, plus 8 additional hours

Option C – Geosciences: GEOS 1234, 3134, 4233, plus 7 additional hours

Program Requirements:

PHYS 1144 and 1244; MATH 1433 or 1534, 1634; STAT 3573; one year of a single foreign language.

GEOSCIENCES TRACK

Major:

GEOS 1134, 1234, 3034 or 4034, 3134, 3234, 3434, 3534, 3634, 3734, 3836, 4001, 4233, 4534.

Program Requirements:

CHEM 1141, 1143, 1241, 1243; PHYS 1144, 1244 or 1624, 2644; MATH 1634 and 1734; one year of a single foreign language.

Requirements for a minor in Geosciences

GEOS 1134, 1234, and 10 additional hours in geosciences, 6 of which must be advanced.

COURSES IN ENVIRONMENTAL SCIENCE (ENSC)

1114. **Foundations of Environmental Science** (TCCNS = ENVR 1401) 4(3-2)
A survey of topics in environmental science including natural resources, populations, ecosystems, biodiversity, and the impact of humans on the environment.
3103. **Environmental Policies and Laws** 3(3-0)
Prerequisites: Two laboratory science courses.
An analysis of contemporary problems in establishing policy, legislation, and regulation to protect the environment at all levels of government from the international to the local level.
4103. **Internship** 3(3-0)
Prerequisites: Seven hours ENSC and two years of biology, chemistry, or geosciences either combined or separately.
Field experience in selected agencies.

COURSES IN GEOSCIENCES (GEOS)

1134. **Physical Geology** (TCCNS = GEOL 1403) 4(3-2)
Elements of earth science including the study of earth materials, interpretation of geologic evidence, and study of geological processes.
1234. **Historical Geology** (formerly 1233) (TCCNS = GEOL 1404) 4(3-2)
Formation of the Earth and the evolution of its origins to the present, plate tectonics, mountain building, and major evolutionary events.
3034. **Oceanography** (formerly 3133) 4(3-2)
Prerequisites: GEOS 1134 or 1234 or BIOL 1144; or GNSC 1104 and 1204; or consent of the instructor.
An introduction to the physical, chemical, geological, and biological processes of the oceans; history of ocean exploration. Laboratory includes weekend field trip to the Texas coast.
3134. **Mineralogy** (formerly 2134) 4(3-2)
Prerequisites: GEOS 1134, CHEM 1141 and 1143 or 1101 and 1103, or consent of the instructor.
An integrated study of the physical and chemical characteristics of minerals and the conditions under which they form, including crystallography and crystal structure, crystal chemistry and variability, mineral associations and genesis, and systematic description and identification.
3234. **Petrology** 4(3-2)
Prerequisite: GEOS 3134 or consent of the instructor. CHEM 1241 and 1243, and MATH 1433 are recommended.
An examination of the characteristics and origins of igneous, sedimentary, and

metamorphic rocks, including the application of experimental and theoretical studies of rock genesis. Laboratory work emphasizes the systematic description, classification, and identification of rocks in hand specimen and thin section.

3434. Structural Geology 4(3-2)

Prerequisite: MATH 1433 or 1534 or consent of the instructor. GEOS 3234 is recommended.

Survey of topics including mechanical principles, classification of structural features, and tectonics. Laboratory emphasizes analysis of both surface and subsurface features and field mapping by graphical and mathematical techniques.

3534. Invertebrate Paleobiology 4(3-2)

Prerequisite: GEOS 1234 or BIOL 1144.

Theoretical and descriptive invertebrate paleobiology. Topics include speciation, extinction, paleoecology, biostratigraphy, and systematics.

3634. Fundamentals of Remote Sensing 4(3-2)

Prerequisite: GEOS 1134 or consent of the instructor.

An introduction to the principles and concepts of digital remote sensing, including an introduction to electromagnetic radiation, remote sensing instrumentation, sensor technology (multispectral, hyperspectral, radar, etc.), earth resource satellites, digital image interpretation and processing, and GIS integration. Course emphasis will include an analysis of remote sensing images (photographs, satellite imagery, radar imagery, etc.) and their interpretation and use for a variety of applications specific to geologic, biologic, and environmental assessment.

3734. Applied Geomorphology 4(3-2)

Prerequisites: GEOS 1134 and 1234, GEOS 3634, or consent of the instructor.

A systematic analysis of the morphology of the Earth's surface--both the continents and the sea floor-- and of the processes which shape that surface. Laboratory work emphasizes the use of paper and digital topographic maps and remotely sensed imagery for geomorphic and geologic interpretation.

3836. Field Geology 6(3-6)

Prerequisites: GEOS 3134, 3434, and 4534.

Six weeks of geosciences field methods including measurement of sections and interpretation of stratigraphy, structure, depositional environments, and igneous and metamorphic rocks.

4001. Geosciences Seminar 1(1-0)

Prerequisite: Senior Geosciences or Environmental Science major or consent of the instructor.

Oral and/or poster presentation of literature or research topics.

4034. Petroleum Geology 4(3-3)

Prerequisites: GEOS 1134, 3134, and 3434, or consent of the instructor.

Teaches the fundamental skills routinely used by petroleum geologists, including basic well log analysis, log and geologic section correlation, cross section construction, and building of data contour and reservoir maps. Exposure to geophysical seismic data, rock sample evaluation, and well drilling operations. Focus on lab exercises as well as integration of computer applications.

4233. **Groundwater Hydrology** 3(2-2)
 Prerequisites: GEOS 1134, 1234, or consent of the instructor.
 An introduction to subsurface groundwater movement and physical properties, emphasizing geological controls on groundwater flow, quantitative methods of the analysis of aquifer systems, regional hydrogeology, water quality, and pollution. Water resources are examined based on their occurrence, movement, and chemistry.
4333. **Advanced Topics in Geosciences** (formerly 4334) 3(2-2)
 Prerequisite: Consent of the instructor.
 Lectures, discussion, reading, presentations, and/or laboratory work on advanced topics in geosciences or environmental science.
4534. **Sedimentology and Stratigraphy** 4(3-2)
 Prerequisites: GEOS 1134 and 1234.
 Analysis of depositional environments based on the physical and chemical formation of sediment, the physics of sediment transport, and post-depositional diagenetic changes. Also includes the study and interpretation of stratified sedimentary rocks, including their identification, description, and modes of origin. Fundamental principles of lithostratigraphic and sequence stratigraphic analysis, mapping, and correlation are also presented.
- 4911, 4912, 4913. **Independent Study in Geosciences/
 Environmental Science** 1-3 semester hours
 Prerequisites: Senior Geosciences major and consent of the instructor and dean. See page 74 for additional requirements.
 Directed research/study in areas of geological science or environmental science.

PROTHRO DISTINGUISHED PROFESSORSHIP OF GEOLOGICAL SCIENCE

The Prothro Distinguished Professorship of Geological Science was established in 1986 to support the work and research of a professor in the Department of Geosciences.

GENERAL SCIENCE

Courses in general science are offered to students who are pursuing their teacher certification with a Bachelor of Science in Interdisciplinary Studies or a Bachelor of Science (with a science major) with secondary certification. (See pages 136-146 and 148-150.)

COURSES IN GENERAL SCIENCE (GNSC)

1104. **Life/Earth Science** 4(3-2)
 A basic course designed to introduce students to the scientific methods and topics in biology and earth science. Creditable only for students seeking grades 1-6 and 4-8 education certification. This course may not be substituted to fulfill science core requirement for other majors.
1204. **Physical Science** 4(3-2)
 An introductory survey of topics in physics and chemistry. Creditable only for students seeking grades 1-6 and 4-8 education certification. This course may not be substituted to fulfill science core requirement for other majors.

3104. Concepts of Science 4(3-2)

Prerequisites: GNSC 1104 and 1204, or equivalent.

The curriculum will emphasize the interaction of the science disciplines and feature the fundamental principles of physical, biological and earth sciences for all levels of teaching science. Creditable only for students seeking an education certification in science.

PHYSICS

Associate Professor: Fleming
Assistant Professor: Dunn
Professors Emeritus: Holverson

MISSION STATEMENT FOR THE PHYSICS PROGRAM

The mission of the Physics Program is to prepare students to pursue degrees in physics, engineering, science, or other areas of intellectual endeavor as well as for employment in various physics or engineering related areas by educating them in the fundamental concepts, knowledge, techniques, and skills of physics.

The requirements for the degree of Bachelor of Science with a major in physics are as follows:

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

Major (32 hours)

Physics 1624, 2644, 3313, 3323, 3333, 3343, 4303, 4323, 4343, 4353

Minor (18 hours)

Mathematics 1634, 1734, 2534, 3433, 3833

Program Requirements

CHEM 1141, 1143, 1241, 1243

Requirements for a Minor in Physics

PHYS 1624, 2644, and 12 additional hours of which 6 must be advanced.

COURSES IN PHYSICS (PHYS)

1144. General Physics (TCCNS = PHYS 1401) 4(3-2)

Prerequisite: MATH 1433 or 1534.

Mechanics, heat, and sound. The first part of a two-semester course in classical and modern physics designed for students who desire a quantitative understanding of physics without calculus.

1244. General Physics (TCCNS = PHYS 1402) 4(3-2)

Prerequisite: PHYS 1144.

Electricity and magnetism, optics, and modern physics. The second part of a two-semester course in classical and modern physics designed for students who desire a quantitative understanding of physics without calculus.

1533. **Descriptive Astronomy** 3(2-2)
 Prerequisite: MATH 1003 or equivalent.
 A survey course in astronomy designed to meet the needs of students majoring in liberal arts, business, and education. Lectures, films, demonstrations, and laboratory work, including the use of the planetarium and telescopes, will be utilized.
1624. **Mechanics, Wave Motion, and Heat** (TCCNS = PHYS 2425) 4(3-2)
 Prerequisite: MATH 1634 or concurrent enrollment therein.
 The first part of a two-semester course in classical and modern physics for students majoring in science.
2104. **Electric Circuits** (formerly 2014) 4(3-2)
 Prerequisite: MATH 1433 or 1534.
 Units, electric fields, DC series and parallel circuits, Kirchoff's Laws, network analysis, and AC circuits.
2204. **Electronics** (formerly 2114) 4(3-2)
 Prerequisite: PHYS 2104.
 Introduction to semiconductor devices, basic amplifiers and feedback, symbolic logic, Boolean algebra, basic TTL gates, counters and flip-flops, and shift registers.
2644. **Electricity and Magnetism and Optics** (TCCNS = PHYS 2426) 4(3-2)
 Prerequisites: PHYS 1624, and credit or concurrent enrollment in MATH 1734.
 The second part of a two-semester course in classical and modern physics for students majoring in science.
3313. **Mechanics** 3(3-0)
 Prerequisites: PHYS 1624 and credit for or registration in MATH 2534 or 3433.
 A mathematical treatment of classical mechanics. Topics includes vector analysis, Newtonian mechanics, oscillations, calculus of variations, and Lagrangian and Hamiltonian dynamics.
3323. **Electromagnetic Field Theory I** 3(3-0)
 Prerequisites: PHYS 2644, MATH 2534 and 3433.
 A mathematical treatment of classical electromagnetic theory. Topics include vector analysis, electrostatics, methods for solving Laplace's and Poisson's Equations, electric and magnetic fields in matter, and electrodynamics.
3333. **Thermodynamics** 3(3-0)
 Prerequisites: PHYS 2644 and credit for or registration in MATH 2534.
 A mathematical treatment of the fundamentals of thermal physics. Topics include the concept of temperature, equations of state, first and second laws of thermodynamics, entropy, change of phase, and thermodynamic functions.
3343. **Modern Physics I** 3(3-0)
 Prerequisites: PHYS 2644 and credit for or concurrent enrollment in MATH 2534 or 3433.
 A course in relativity and elementary quantum mechanics. Topics include space-time, relativistic energy and momentum, Heisenberg's Uncertainty Principle, Schrodinger's Equation, observables and operators, bound states, potential barriers, and the hydrogen atom.

4303. Mathematical Methods of Physics 3(3-0)

Prerequisite: MATH 2534 or 3433.

A course presenting mathematical techniques used in physics and engineering. Topics include infinite series, integral transforms, complex variables, matrices and tensors, special functions, partial differential equations, Green's functions.

4323. Electromagnetic Field Theory II 3(3-0)

Prerequisites: PHYS 3323, MATH 2534 and 3433.

A continuation of PHYS 3323. Topics include Maxwell's equations, conservation laws, electromagnetic waves, potentials and fields, radiation and relativistic electrodynamics.

4343. Modern Physics II 3(3-0)

Prerequisite: PHYS 3343.

The constitution of the atomic nucleus; natural radioactivity; artificially induced nuclear transmutations; alpha, beta, and gamma decay; nuclear reactions; nuclear structure and nuclear forces; nuclear fission; neutron physics.

4353. Quantum Physics 3(3-0)

Prerequisite: PHYS 3343, MATH 3433, or consent of instructor.

The Schrodinger Equation, one dimensional systems; the Heisenberg Uncertainty Principle; angular momentum; two and three dimensional systems; approximation methods; scattering theory.

4911, 4933. Independent Study 1, 3 semester hours

Prerequisite: Permission of the chair of Physics.

CLINICAL LABORATORY SCIENCE

Asma Javed, Coordinator (Bolin Hall 220B)

The Bachelor of Science in Clinical Laboratory Science degree consists of 130 semester hours. Upon successful completion of an AMA approved curriculum, the student is eligible to take the National Certification examinations for Medical Technologists.

This is a special academic program that has a separate academic foundations curriculum. (See page 100.)

Basic Core (27 semester hours)

Political Science 1333, 1433

English 1113, 1123

Mathematics 1233

History 1133, 1233

Speech Communication - 3 hours

Demonstrate computer literacy by taking a proficiency test or earning credit for CMPS 1013, 1023, 1033, 1044, or EDUC 1023.

Additional 18 hours

Select from at least four of the following areas: Social and Behavioral Sciences, Sciences, Fine Arts, Speech Communication (cannot be same course used in Basic Core), Humanities, Economics, and Exercise Physiology.

NOTE: BSCL students may choose 12 hours from three of the areas listed above and count the other 6 hours from the sciences below.

Major - CLINICAL LABORATORY SCIENCE

Academic Course Work (50 semester hours)

Biology 1144; 1134 and 1234; 2144, 3003, 4023

Chemistry 1141, 1143, 1241, 1243, 2001, 2003; 3305

Statistics 3573

Additional hours to be selected from Biology or Chemistry to bring total to 50 hours.

Practicum (41 semester hours)

Successful completion of a clinical practicum in a medical technology program approved by the Committee on Allied Health Education and Accreditation of the American Medical Association. Forty-one advanced semester hours are awarded in the following areas of instruction: hematology, chemistry, urinalysis, serology, microbiology, blood banking, laboratory rotation.

The coordinator of the clinical laboratory science program will receive and approve syllabi and text materials describing the content of the clinical phase of the clinical laboratory science program. Additionally, the coordinator will review test materials and routinely observe the student in the clinical setting before practicum credit is validated. Practicum credit will be posted upon written approval of the University's coordinator of the clinical laboratory science program.

COMPUTER SCIENCE

Ranette H. Halverson, Chair (Bolin Hall 126A)

Professors: Donovan, Halverson, Passos, Stringfellow

Assistant Professors: Griffin, Johnson, Simpson

Professor Emeritus: Carpenter

MISSION STATEMENT FOR THE DEPARTMENT OF COMPUTER SCIENCE

The mission of the Department of Computer Science is to provide a source of knowledge to students in preparation for work in the computing field or for entry into graduate programs in computing and related disciplines. The department provides classroom, laboratory, and discovery experiences which emphasize theory, application, and contemporary research in the computing sciences. Graduates of the department are supported by a liberal arts education and are prepared to be productive members of society.

The requirements for the degree of Bachelor of Science with a major in computer science are as follows:

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

Bachelor of Science (see page 93)

Program Requirements**Major**

Computer Science 1044, 1063, 2084, 2143, 2433, 3013, 3023, 3233, 4103, 4113, 4143, 4991, and 15 hours of advanced computer science electives. (Computer Science 1013, 1023, and 1033 may not be counted toward a major in Computer Science.)

Minor is not required.

Additional Requirements

MATH 1534, 1634, 1734, and 3 hours from 3533, 3833, or 4243

PHYS 1624, 2644

Computer Science Exit Exam

The requirements for the degree of Bachelor of Arts with a major in computer science are as follows:

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

Bachelor of Arts (see page 93)

Program Requirements**Major**

Computer Science 1044, 1063, 2084, 2143, 2433, 3013, 3023, 3233, 4103, 4113, 4143, 4991, and 15 hours of advanced computer science electives. (Computer Science 1013, 1023, and 1033 may not be counted toward a major in Computer Science.)

Minor is not required.

Additional Requirements

MATH 1233, 1433

STAT 3573

Computer Science Exit Exam

Minor in Computer Science

The requirements for a minor in computer science are Computer Science 1044, 1063, 2084, 2143, 2433, 3013, and 6 hours of computer science electives (3 advanced).

COURSES IN COMPUTER SCIENCE (CMPS)**1013. Computer Concepts and Applications (TCCNS = COSC 1301) 3(2-2)**

An introduction to common software applications and computer terminology across a wide variety of disciplines, building a framework for computer use in a technological world. Emphasis is placed on lifelong learning and application of computers to everyday problems through software tools and online techniques. Contemporary topics in the area of computers, technology, and ethical issues are also included. Satisfies the general degree requirement for computer literacy.

1023. **Computing for Science Majors** 3(3-0)
 Prerequisites: MATH 1233 or 1534 or concurrent enrollment therein. Declared major in the College of Science and Mathematics or permission of instructor.
 Study of topics related to the use of computers in the natural sciences. Topics include, but are not limited to, advanced use of word processing, spreadsheets, presentation software; also statistical software, scientific visualization, natural science simulation, image processing, and string processing in a command-line environment. Satisfies the general degree requirement for computer literacy.
1033. **Introductory Topics in Computing** 3(2-2)
 Selected topics from introductory areas of computer science. Topics are selected to meet the needs of non-computer science majors. Satisfies the general degree requirement for computer literacy.
1044. **Computer Science I** (formerly 1043) (TCCNS = COSC 1420) 4(3-2)
 Prerequisite: Concurrent enrollment in MATH 1233 or 1534 or MATH 1203 (for Business majors).
 Introduction to methods of problem solving and algorithm development. A high-level programming language is taught with an emphasis on program design, coding, debugging, testing, and documentation. Discussion of ethical, social, and legal issues related to computing.
1053. **Computer Science II** (TCCNS = COSC 2320) 3(3-0)
 Prerequisites: Minimum grades of C in CMPS 1044 and MATH 1233 or 1534 or MATH 1203.
 A continuation of the development of a disciplined approach to the design, coding, debugging, and testing of programs. Introduction to algorithmic analysis, recursion, data structures, and sorting mechanisms using a high-level language.
1063. **Data Structures and ADT** (TCCNS = COSC 2315) 3(3-0)
 Prerequisites: Minimum grade of C in CMPS 1044, and MATH 1233 or 1534.
 A continuation of the development of a disciplined approach to the design, coding, debugging, and testing of programs. Introduction to data structures, abstract data types (ADT), recursion, and algorithm analysis using a high-level language.
2084. **Introduction to Computer Architecture** (TCCNS = COSC 2425) 4(3-2)
 Prerequisite: Minimum grade of C in CMPS 1044.
 An introduction to the components, functions, and logical relationships present in current scalar computers, including the central processing unit, different levels of memory, control signals, bus systems, data channels, and input/output devices. Also covered are instruction sets and assembly language programming.
2133. **Data Structures** 3(3-0)
 Prerequisites: MATH 2333 and minimum grade of C in CMPS 1053.
 Object-oriented approach to design and analysis of algorithms, particularly those related to the processing of data structures, including trees, graphs, and linked lists. Other techniques include searching, sorting, and merging. Discussion of legal, social, and ethical issues.
2143. **Object-Oriented Programming** 3(3-0)
 Prerequisite: Minimum grade of C in CMPS 1063.
 Introduction to object-oriented programming techniques including but not limited to classes, objects, inheritance, polymorphism, and overloading. Various object-oriented languages will be considered.

- 2433. Discrete Structures and Analysis** 3(3-0)
Prerequisites: Minimum grades of C in CMPS 1063 and MATH 1233 or 1534.
Introduction to the fundamental techniques of algorithm analysis. Also, Boolean logic, combinatorics, functions, graphs, algebraic structures, recursion, recurrence relations, finite state machines, and computability.
- 3013. Advanced Structures and Algorithms** 3(3-0)
Prerequisite: Minimum grade of C in CMPS 2433.
In-depth study of complexity analysis and variety of advanced structures and related algorithms. Topics will be selected from trees, heaps, priority queues, graphs, hashing, sorting, pattern matching, recursion, and others as appropriate.
- 3023. Logic Design** 3(3-0)
Prerequisite: Minimum grade of C in CMPS 2084.
Study of topics related to the design of modern microprocessors, including Boolean algebra, logic gates, design simplification techniques, memory design, programmable control units, and use of hardware description languages.
- 3233. Theory of Computation** 3(3-0)
Prerequisites: Minimum grade of C in CMPS 1063 and 2433.
Study of the fundamental mathematical properties of hardware, software, and their applications. Emphasis is on the capabilities and limitation of computers, including finite automata, push-down automata, and Turing machines.
- 3493. Internet Programming** 3(3-0)
Prerequisite: Minimum grade of C in CMPS 1063.
This class introduces the technologies and issues related to programming Internet and Intranet applications. It involves the study of such Internet languages as Dynamic HTML and Javascript, file format types, basic database access, SQL, and such common tasks as representing, storing, compressing, manipulating, interacting with, and presenting text, drawings, still images, animations, audio and video in web pages.
- 3533. Numerical Analysis** 3(3-0)
Prerequisites: CMPS 1044 and MATH 1734.
Use of numerical methods to solve problems including but not limited to the following: function approximation, solutions of equations, numerical calculus, and differential equations. Includes analysis of problems and the design and writing of programs. (MATH 3533 and CMPS 3533 cannot both be taken for credit.)
- 4103. Introduction to Operating Systems** 3(3-0)
Prerequisites: Minimum grades of C in CMPS 2084 and 3013.
An introduction to operating systems for contemporary multitasking, single processor computers. Topics include processes, process management and scheduling, interprocess synchronization and communication, memory management, and file management. Selected theories and concepts are supplemented with an examination of their implementation in contemporary operating systems. Discussion of legal, social, and ethical issues.
- 4113. Software Engineering** 3(3-0)
Prerequisites: CMPS 2143, 3013, and 6 advanced hours in computer science.
Application of structured methodology and formal methods to the design, implementation, and documentation of computer software systems. Includes an introduction to the management of software development teams, requirements analysis, testing procedures, and user interface design. Discussion of legal, social, and ethical issues.

4123. **Database Managements Systems** 3(3-0)
Prerequisite: CMPS 3013.
A study of concepts, characteristics, design, and implementation of database management systems. Hierarchical, network, and relational approaches to DBMS designs are examined. Such advanced models as object-oriented databases and image retrieval systems are also discussed. Query languages are presented.
4143. **Topics in Contemporary Programming Languages** 3(3-0)
Prerequisite: CMPS 2143.
A study of the syntax, semantics, and implementation of a contemporary programming language with emphasis on program development, program structuring, and the program development environment of the language. Assignments focus on representative applications of the language. May be repeated for credit with approval of the department chair.
4213. **Introduction to Computer Graphics** 3(3-0)
Prerequisites: CMPS 2143, 3013, and MATH 1634.
A study of computer graphics hardware and software with an emphasis on interactive real-time rendering. Topics include but are not limited to mathematics of graphics, 2D and 3D transformations, 3D viewing, polygonal meshes, hidden line and surface algorithms, collision detection, and surface shading and texturing.
4223. **Introduction to Simulation** 3(3-0)
Prerequisite: CMPS 2433.
Introduction to techniques and special purpose languages for the simulation of discrete systems, with an emphasis on queuing systems. Methods for the statistical analysis of the results are included.
4233. **Artificial Intelligence** 3(3-0)
Prerequisite: CMPS 3013.
Topics to be studied include but are not limited to the following: classical problems in artificial intelligence, knowledge representation, state-space search techniques, image processing, neural networks, pattern matching, machine reasoning, and problem solving using LISP.
4313. **Interactive 3D Game Graphics** 3(3-0)
Prerequisite: CMPS 4213.
Introduction to design and programming of real-time 3D graphics. The course will include, but not be limited to, a study of 3D file formats, model design using 3D modeling tools, model rendering, texturing and animation, high speed terrain rendering, billboard, skyboxes, collision detection, and game engine design. In addition the course will utilize contemporary graphics API's in development of 3D virtual environments frequently encountered in modern, interactive games.
4433. **Computer Communications and Networks** 3(3-0)
Prerequisites: CMPS 1063, 2084, and 2433.
A study of hardware and software used in data communication systems; the seven OSI network layers are discussed and compared to other implementations. Consideration is given to communication media, protocols, packet switching networks, local- and wide-area networks, high-speed networks, the Internet, and the World Wide Web. Applications such as file transfer, interactive access, web browsers, and server mechanisms are also presented.

4453. Computer Architecture 3(3-0)

Prerequisite: CMPS 2084.

A study of the organization and interconnection of components of computer systems. Emphasis is given to the study of the instruction set and performance analysis of different computer architectures. Also included in the study are microprogramming, pipeline, overlap processing, superscalar, parallel, and massively parallel architectures. Current trends in computer design are also discussed.

4663. Topics in Computer and Networking Security 3(3-0)

Prerequisites: Minimum grades of C in CMPS 1053 or 1063, and in CMPS 2084.

Selected topics from computer and network security, including applications and operating system vulnerabilities, cryptography, computer forensics, web application weaknesses, malicious code attacks, intrusion detection, data protection, cyber warfare, user authentication, defensive programming, and ethical hacking. May be repeated for credit with consent of the department chair.

4773. Internship in Computer Science 3(3-0)

Prerequisite: Consent of the chair.

Field experience in computing with an approved business and/or organization.

4883. Topics in Computer Science 3(3-0)

Prerequisite: Consent of the instructor.

Selected topics from advanced computer science. May be repeated for credit with consent of chair.

4991. Seminar in Social Responsibility 1 semester hour

Prerequisite: Must be in last year prior to graduation.

A self-study in the ethical, legal, and social issues related to computing. Students research, prepare, and present a talk on a related issue.

4993. Independent Study 3 semester hours

Prerequisite: Consent of the chair.

Directed research or study in computer science.

DENTAL EARLY ACCEPTANCE PROGRAM (DEAP)

Christopher Hansen (Bolin Hall 307G)

3 + 4 Dual Degree and Dental Early Admissions Program (DEAP)

Joint Agreement between Midwestern State University and The University of Texas Health Science Center at San Antonio Dental School

PURPOSE OF PROGRAM

The 3+4 Dual Degree and Dental Early Admission Program (DEAP) offers outstanding freshmen students with an interest in dentistry an opportunity to receive early acceptance to the University of Texas Health Science Center at San Antonio Dental School and to receive both a Bachelor of Science Degree in Biology or Chemistry at Midwestern State University and a Doctor of Dental Surgery Degree at The University of Texas Health Science Center at San Antonio (UTHSCSA) within seven years.

DESCRIPTION AND POLICY OF THE PROGRAM

1. The student must be admitted to Midwestern State University.
2. When the student has completed no fewer than 12 and no more than 32 semester hours of academic work, he/she must be accepted to the DEAP program as described below.

- a. The student must be accepted for admission to DEAP by Admissions Advisor or Health Professions Advisor at Midwestern State University.
- b. The student must have an acceptable pre-entry interview by faculty of the UTHSCSA Dental School. This interview is to determine the student's motivation for the dental profession, and qualities of character and personality of value to the future dentist.
- c. The student must have Texas resident status or a waiver for entry to DEAP from the Associate Dean for Student Affairs of the Dental School.

Acceptance will not be granted to individuals who have been charged with or convicted of a felony or misdemeanor other than minor traffic violations. (A waiver may be granted by the Dental School in exceptional situations.)

3. The student must complete an accelerated curriculum designed by Midwestern State University that consists of 106-111 semester hours of specified coursework. (Course requirements are listed in the Undergraduate Curriculum at Midwestern State University section below.).
4. The student must attend a DEAP Orientation workshop at the Dental School during the summer between the second and third undergraduate years. Summer research opportunities at the UTHSCSA will be made available to interested students whenever possible.
5. The student must take the Dental Admission Test (DAT) and must submit an application to the University of Texas Dental Application Center before November 1 of the third undergraduate year.
6. Following successful completion of the three-year Midwestern State University curriculum, the student will enroll in the UTHSCSA Dental School contingent on the following:
 - a. A grade of "C" or above in all required pre-dental courses and at least 106-111 semester hours of specified courses.
 - b. A cumulative GPA of 3.4 or above for all courses taken in the three years of Midwestern State University DEAP curriculum.
 - c. A science GPA of 3.4 or above for all science courses required in the three-year Midwestern State University DEAP curriculum.
 - d. A score on the Dental Admission Test (DAT) of 18 or above.
 - e. A positive recommendation from the Admissions Advisor or Health Professions Advisor from Midwestern State University.
 - f. A positive record of ethical behavior while a pre-dental student.

NOTE: Students who fall below the GPA requirements will have their application considered by the Dental School Admissions Committee and will be given favorable consideration whenever possible.

7. Following successful completion of the freshman academic year of the Dental School, the student will be granted a B.S. Degree - Biology or Chemistry from Midwestern State University in accordance with the option chosen below.
8. Following successful completion of the four-year curriculum of Dental School, the student will be granted a D.D.S. degree by the Dental School.

TERMINATION OF JOINT AGREEMENT

Termination of this joint agreement may be initiated by either party. Written notice of intent to terminate must be delivered to the other party at least six months prior to the effective

date of termination. Students enrolled in the program at the time of termination of this joint agreement will be given the opportunity to complete the program.

UNDERGRADUATE CURRICULUM AT MIDWESTERN STATE UNIVERSITY

1. The student must complete 106-111 hours of undergraduate course work as specified below. Upon the successful completion of the first year of dental school, 16-20 hours of credit from the dental school will be transferred to Midwestern State University and counted toward the Midwestern State University B.S. degree in Biology or Chemistry.
2. Courses to be taken at Midwestern State University:

A. Biology Degree

Freshman Year

Fall

BIOL 1144
CHEM 1141/1143
ENGL 1113
MATH 1534
EXPH (1 hour)

Spring

BIOL 1544
CHEM 1241/1243
ENGL 1123
MATH 1634
EXPH (1 hour)

Summer Session

HIST 1133
PSYC 1103 or SOCL 1133

HIST 1233

Sophomore Year

Fall

BIOL 3054
POLS 1333
CHEM 2001/2003
SPCH 1133
Fine Arts (3 hours)

Spring

BIOL 3064
POLS 1433
CHEM 2011/2013
ECON 1333
CMPS 1023

Summer Session

Dental Enrichment Program at Dental School

Junior Year

Fall

BIOL 3334
BIOL or CHEM (3 adv. hours)
PHYS 1144
Foreign Language (4 hours)

Spring

BIOL 3144
BIOL or CHEM (3 adv. hours)
PHYS 1244
Foreign Language (4 hours)

TOTAL MSU HOURS: 106

TOTAL UTHSCSA HOURS: 20 (to be applied to the MSU degree requirements at the end of the first year of dental school)

B. Chemistry Degree**Freshman Year****Fall**

BIOL 1144
 CHEM 1141/1143
 ENGL 1113
 MATH 1534
 EXPH (1 hour)

Spring

BIOL 1544
 CHEM 1241/1243
 ENGL 1123
 MATH 1634
 EXPH (1 hour)

Summer Session

HIST 1133
 Fine Arts (3 hours)

HIST 1233
 PSYC 1103 or SOCL 1133

Sophomore Year**Fall**

BIOL 3054
 POLS 1333
 CHEM 2001/2003
 MATH 1734

Spring

BIOL 3064
 POLS 1433
 CHEM 2011/2013
 ECON 1333

Summer Session

Dental Enrichment Program at Dental School
 SPCH 1133

CMPS 1023

Junior Year**Fall**

BIOL 3334
 CHEM (5 adv. hours)
 PHYS 1624
 Foreign Language (4 hours)

Spring

BIOL 3144
 CHEM (3 adv. hours)
 PHYS 2644
 Foreign Language (4 hours)

TOTAL MSU HOURS: 111

TOTAL UTHSCSA HOURS: 16 (to be applied to the MSU degree requirements at the end of the first year of dental school)

3. Courses to be completed at the Dental School during the first year and transferred to Midwestern State University to satisfy the requirements of the B.S. degree in Biology or Chemistry

5.0 hours Dental Histology
 7.5 hours Gross Head & Neck Anatomy
 1.5 hours Dental Anatomy
 2.5 hours Preclinical Dental Anatomy
 5.5 hours Biochemistry
 1.0 hour Nutrition
 6.5 hours Physiology I
4.0 hours Pharmacology
 33.5 hours

MATHEMATICS

Dawn Slavens, Chair (Bolin Hall 113A)

Professors: Donovan, Farris, Mitchell, Slavens, Tucker

Associate Professors: Bernard, Fosnaugh, Hood, Knox, McDonald, Schmitter

Assistant Professors: Belcher, May, Richardson

Instructor: Jones

Professors Emeriti: Hinds, Huffman, Meux, Newton, Rowell, Spiller, Warndorf

MISSION STATEMENT FOR THE DEPARTMENT OF MATHEMATICS

The mission of the Department of Mathematics is to promote student understanding of mathematics. The program provides opportunities for its majors to study mathematics both in breadth and depth. Graduates of the program are prepared for entry into graduate school or mathematics-related careers including the teaching profession. The program also serves the university by providing a broad spectrum of introductory level courses so that students in all majors can fulfill the mathematics portion of a quality liberal arts curriculum.

The requirements for the Bachelor of Arts and Bachelor of Science degrees with majors in mathematics are as follows:

General (see page 89)

Academic Foundations and Core Curriculum (see page 91)

Bachelor of Science (see page 93)

Bachelor of Arts (see page 93)

Program Requirements

Major

Mathematics 1634, 1734, 2133, 2534, 3293, 3833, 4133, 4733, plus 9 additional advanced hours of mathematics courses (at least one course must be MATH 4143, 4293, or 4833), exclusive of Math 3033, 3113, 3123, and 4033.

Additional Requirements

Consult advisor for approved minor and specific courses.

CMPS 1044, 1053

STAT 3573

All Mathematics majors must complete a minor of at least 18 semester hours of which at least six must be advanced. The minor field must be acceptable to the chairs of the majors and minor programs.

TEACHER CERTIFICATION IN MATHEMATICS

The requirements for a Bachelor of Science degree **with Grades 8 – 12 Certification in Mathematics** are found on page 149. The requirements for a Bachelor of Science in Interdisciplinary Studies degree **with Middle School Mathematics (4-8) Certification** are found on page 139.

Requirements for a minor in Mathematics.

Twenty-one hours of mathematics to include 1634, 1734, 2133, 2534, and 6 advanced hours exclusive of 3033, 3113, 3123, and 4033.

CREDIT BY EXAMINATION

Proficiency examinations are given for MATH 1233, MATH 1433, MATH 1534, MATH 1634, and MATH 1734. For more information, students may contact the Chair of Mathematics.

COURSES IN MATHEMATICS (MATH)

0003. **Beginning Algebra** 3(3-0)
 Properties of integers, fractions, decimals, percentages, linear equations and inequalities and their graphs, integer exponents, polynomials, deductive and inductive reasoning; interpretation of data from graphs and charts, and geometric problems.
1003. **Intermediate Algebra** 3(3-0)
 Prerequisite: MATH 0003 with a grade of C or better, math THEA score of 230, math Accuplacer score of 63, or satisfactory score on placement exam.
 Factoring polynomials, quadratic equations and their graphs, rational expressions, rational exponents, radicals, and systems of linear equations.
1053. **Contemporary Mathematics** (TCCNS = MATH 1332) 3(3-0)
 Prerequisite: MATH 1003, math THEA score of 270, math Accuplacer score of 90, or satisfactory score on placement exam.
 A survey of the use of mathematics in the modern world. Topics include theory of elections and apportionment, graphs and networks, growth and symmetry, or statistics.
1203. **Mathematical Analysis for Business** (TCCNS = MATH 1324) 3(3-0)
 Prerequisite: MATH 1003 with a grade of C or better, math THEA score of 270, math Accuplacer score of 90, or satisfactory score on placement exam.
 Review of algebra, linear and quadratic equations, graphs, progressions and mathematics of finance, and matrix operations. Each student must have a graphing calculator.
1233. **College Algebra** (TCCNS = MATH 1314) 3(3-0)
 Prerequisite: MATH 1003 with a grade of C or better, math THEA score of 270, math Accuplacer score of 90, or satisfactory score on placement exam.
 Equations, inequalities, rational expressions, exponents, logarithms, radicals, functions, graphs, and systems of equations. Each student must have a graphing calculator. (This course is designed for students planning to take additional mathematics.)
1433. **Plane Trigonometry** (TCCNS = MATH 1316) 3(3-0)
 Prerequisite: MATH 1233 with a grade of C or better.
 Trigonometric functions, identities and equations, complex numbers. Each student must have a graphing calculator.
1534. **Precalculus** (formerly 1533) (TCCNS = MATH 2412) 4(4-0)
 Prerequisite: MATH 1003 with a grade of C or better, math THEA score of 270, math Accuplacer score of 90, or satisfactory score on placement exam.
 Applications of algebra and trigonometry to the study of elementary functions and their graphs including polynomial, rational, exponential, logarithmic and trigonometric functions.

Each student must have a graphing calculator. This course is intended for students planning to take MATH 1634.

1634. Calculus I (TCCNS = MATH 2413) 4(4-0)

Prerequisite: MATH 1433 or 1534 with grade of C or better.

Differentiation of functions of one variable with applications, integration including simple substitution and numerical evaluation, and applications of integration. Each student must have a graphing calculator.

1734. Calculus II (TCCNS = MATH 2414) 4(4-0)

Prerequisite: MATH 1634 with a grade of C or better.

Elementary transcendental functions, techniques of integration, sequences, series, Taylor's formula, conic sections, parameterized curves, and polar coordinates. Each student must have a graphing calculator.

2033. Structure of the Number System I (TCCNS = MATH 1350) 3(3-0)

Prerequisite: MATH 1233 with a grade of C or better.

Patterns and sequences, sets, the structure of various numeration systems, the four fundamental operations of arithmetic, integers, rational numbers, and elementary number theory. This course stresses conceptual understanding of mathematics through concrete examples, models, multiple representations of ideas and concepts, and processes of mathematical reasoning.

2043. Structure of the Number System II (TCCNS = MATH 1351) 3(3-0)

Prerequisite: MATH 2033 with a grade of C or better.

Decimals, ratio and proportion, percents, real numbers; properties of basic geometric figures in two and three dimensions; congruence, construction, similarity, and basic geometric proof; measurement, perimeter, area, surface area, volume, and unit conversions; Pythagorean theorem and distance formula. This course stresses conceptual understanding of mathematics through concrete examples, models, multiple representations of ideas and concepts, and processes of mathematical reasoning.

2133. Introduction to Modern Mathematics 3(3-0)

Prerequisite: MATH 1634 with a grade of C or better.

Introduction to logic and methods of proof, set operations, equivalence relations, functions, mathematical induction, and cardinality. Other topics related to the study of the structure of mathematical proof may be included.

2333. Discrete Mathematical Structures (TCCNS = MATH 2305) 3(3-0)

Prerequisite: MATH 1233 or 1534.

Logic, combinatorics, functions, graphs, Boolean algebra, logic networks, algebraic structures, finite state machines, and computability.

2534. Calculus III (TCCNS = MATH 2415) 4(4-0)

Prerequisite: MATH 1734 with a grade of C or better.

Space geometry and vectors, vector-valued functions, partial differentiation with applications, and multiple integration with applications. Each student must have a graphing calculator.

2603. **Math for Thermodynamics** 3(3-0)
 Prerequisite: MATH 1734.
 Applications of series, linear algebra, complex numbers, vector analysis, multivariate integration, and partial differentiation in the study of Physical Chemistry.
3033. **Concepts of Calculus** 3(3-0)
 Prerequisite: MATH 1233 with a grade of C or better.
 An introduction to differential and integral calculus. Focus will be on the conceptual development of limits, rates of change, and techniques for calculating and approximating length, area, and volume. This course is appropriate for those seeking 4-8 mathematics teacher certification.
3113. **Techniques in Problem Solving** 3(3-0)
 Prerequisites: MATH 1233 and 2033 with grades of C or better.
 Problem-solving techniques and strategies using patterns, logic, number theory, algebra, geometry, combinatorics, strategy games, and network theory.
3123. **Concepts of Geometry** 3(3-0)
 Prerequisites: MATH 1233 and 2043 with grades of C or better.
 This course covers standard concepts from Euclidean geometry, including congruence, similarity, parallel postulates, constructions, transformations, area postulates, and constructions using software such as Geometer's Sketchpad. This course is appropriate for those seeking 4-8 mathematics teacher certification.
3133. **Foundations of Geometry** 3(3-0)
 Prerequisite: MATH 2133.
 Elementary geometry from an advanced point of view. An axiomatic study of Euclidean geometry plus additional topics which may include finite geometries and non-Euclidian geometries. Students will use a geometry software package. This course is appropriate for those seeking 8-12 mathematics teacher certification.
3293. **Abstract Algebra I** 3(3-0)
 Prerequisite: MATH 2133 with grade of C or better.
 Introduction to algebraic structures, including groups, group isomorphism, homomorphisms, direct products, and introduction to rings.
3353. **Discrete Dynamical Systems** 3(3-0)
 Prerequisite: MATH 1734.
 Iteration of functions, quadratic maps on the line and on the plane, orbit diagrams, Julia sets, Mandelbrot sets, iterated function systems.
3433. **Differential Equations** 3(3-0)
 Prerequisite: MATH 1734.
 Introduction to the theory of and applications of ordinary differential equations; solution techniques for linear and separable equations; numerical approximation of solutions; introduction to phase plane analysis and non-linear problems; Laplace transforms.
3533. **Numerical Analysis** 3(3-0)
 Prerequisites: CMPS 1044 and MATH 1734.
 Use of numerical methods to solve problems including but not limited to the following: function approximation, solutions of equations, numerical calculus, and differential equations. Includes analysis of problems and the design and writing of programs. (MATH 3533 and CMPS 3533 cannot both be taken for credit.)

350

3833. Linear Algebra 3(3-0)

Prerequisite: MATH 1634.

Vector spaces, linear equations and matrices, linear transformations and matrices, determinants, polynomials and matrices. Each student must have a calculator with matrix capabilities.

FOR UNDERGRADUATES AND GRADUATES

4003. History of Mathematics 3(3-0)

Prerequisite: MATH 1734.

A survey of the development of major mathematical topics, including geometry, algebra, calculus, and advanced mathematics. Philosophical and cultural aspects will be integrated with the structure, theorems, and applications of mathematics.

4033. Foundations of Discrete Mathematics 3(3-0)

Prerequisites: MATH 2043 and 3033 with grades of C or better.

Set theory, mathematical induction, difference equations, number theory, graph theory, and introduction to proofs. (This course is designed for students planning to teach grades 4-8 mathematics.)

4133. Mathematical Statistics I 3(3-0)

Prerequisite: MATH 2534 or consent of instructor.

Probability theory, random variables, distributions, generating functions, and limit theorems.

4143. Mathematical Statistics II 3(3-0)

Prerequisites: MATH 4133 and STAT 3573.

Sampling distributions, point and interval estimation, hypothesis testing, goodness of fit, ANOVA, correlation, and regression.

4223. Discrete Mathematics 3(3-0)

Prerequisite: MATH 2133.

Combinatorics, graph theory, and difference equations.

4243. Operations Research 3(3-0)

Prerequisites: MATH 1734 and CMPS 1044.

A study of linear programming including convex sets, geometric solutions, simplex methods, duality, sensitivity analysis, and integer programming.

4293. Abstract Algebra II 3(3-0)

Prerequisite: MATH 3293.

A continuation of MATH 3293, with emphasis on rings, integral domains, fields, ideals, factor rings, and polynomial rings.

4453. Theory of Numbers 3(3-0)

Prerequisite: MATH 2133.

Divisors and prime numbers; congruences; primitive roots; quadratic residues; continued fractions; elliptical curves; cryptography.

4573. Complex Analysis 3(3-0)

Prerequisites: MATH 2133 and 2534.

Functions of one complex variable, Cauchy integral formula, Taylor series.

351

4733. **Introductory Analysis I** 3(3-0)
Prerequisites: MATH 1734 and 2133.
Foundations of the calculus to include sequences, series, continuity, differentiation, and integration.
4833. **Introductory Analysis II** 3(3-0)
Prerequisite: MATH 4733.
A continuation of MATH 4733.
4933. **Topics** 3(3-0)
Prerequisite: Consent of the instructor.
Selected topics from advanced mathematics. May be repeated for credit with consent of chair.
- 4991, 4992, 4993. **Independent Study** 1-3 semester hours
Prerequisite: Consent of the chair (see page 74).
Directed research in mathematics.

MCCOY SCHOOL OF ENGINEERING

Sheldon Wang, Chair (McCoy Engineering Hall 105A)

Professors: Azouz, Wang

Associate Professors: Azzouz, Brink

Assistant Professor: McDonald

Professors Emeriti: Faulk, Sutko

MISSION STATEMENT FOR THE MCCOY SCHOOL OF ENGINEERING

The McCoy School of Engineering supports the missions of the University and the College of Science and Mathematics by providing quality undergraduate education to students and professional expertise for local and regional industry, government agencies, and other educational entities. This is accomplished in the context of a four-year mechanical engineering program and major design experiences that prepare graduates for successful professional careers and the pursuit of advanced degrees in engineering or other related fields.

MECHANICAL ENGINEERING

Mission

The mission of the Mechanical Engineering Program is to provide each graduate with a foundation of knowledge and training upon which to build a successful career in mechanical engineering or related fields. Graduates of the program are well grounded in scientific, mathematical, and mechanical engineering knowledge through curricular activities that reflect technological advances. Students learn to analyze, synthesize, and design mechanical engineering systems, communicate information, and understand and appreciate the need for life-long learning.

Program Education Objectives

The Midwestern State University mechanical engineering graduates will

1. display a high level of engineering knowledge and expertise; therefore, graduates will be competitive with their peers in local and global markets;

2. exhibit critical thinking skills necessary to practice engineering design and analysis in a disciplined process;
3. function at a high level of responsibility, individually and in teams, while exhibiting excellent oral, written, and visual communication skills;
4. possess the skills and knowledge to pursue advanced studies and/or assume leadership roles along diverse career paths; and
5. demonstrate a strong appreciation for and commitment to ethical, societal, environmental, and professional responsibilities.

Program Outcomes

The outcomes of the Mechanical Engineering Program include those established by ABET and additional outcomes that are specific to mechanical engineering. Upon completion of the baccalaureate degree in mechanical engineering, each graduate will have

- a) an ability to apply knowledge of mathematics, science, and engineering;
- b) an ability to design and conduct experiments, as well as to analyze and interpret data;
- c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;
- d) an ability to function on multidisciplinary teams;
- e) an ability to identify, formulate, and solve engineering problems;
- f) an understanding of professional and ethical responsibility;
- g) an ability to communicate effectively;
- h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context;
- i) a recognition of the need for, and an ability to engage in life-long learning;
- j) a knowledge of contemporary issues;
- k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice;
- l) a knowledge of chemistry and calculus-based physics with depth in at least one;
- m) the ability to apply advanced mathematics through multivariate calculus and differential equations; and
- n) the ability to work professionally in both thermal and mechanical systems areas including the design and realization of such systems.

The Bachelor of Science in Mechanical Engineering is a special academic program that has a separate academic foundations curriculum. (See page 100.)

Basic Core (25 semester hours)

POLS 1333 and 1433
 ENGL 1113 and 1123
 MATH 1634
 HIST 1133 and 1233
 SPCH 1133, 1233, or 2423
 (MENG majors demonstrate computer literacy by taking MENG 3243 in the major.)

Additional Academic Course Work (31 semester hours):

PHIL 2033
 ENGL 3203
 PHYS 1624 and 2644
 CHEM 1141 and 1143
 MATH 1734, 2534 and 3433

Two semester hours to be selected from Exercise Physiology activities courses or Visual and Performing Arts as shown on page 92.

(MENG majors meet the core requirement for economics with MENG 2133, Engineering Economics.)

Mechanical Engineering Major Course Work (75 semester hours):

MENG 1101, 1132, 1202, 2104, 2113, 2133, 2203, 2204, 2213, 2223, 3104, 3114, 3123, 3203, 3212, 3233, 3234, 3243, 4122, 4123, 4134, 4143, 4203, 4243, and 4253.

The Fundamentals of Engineering (FE) exam is required for graduation effective Fall 2008. This requirement is waived for students who are already in the program as of Spring 2008. However, all students are encouraged to take this exam, which is the first step toward becoming a registered professional engineer.

Only one grade of D is allowed in any engineering/mathematics/physics/chemistry course, and the student must earn a C or better in all advanced courses, and achieve an overall cumulative GPA of at least 2.0. (Effective Fall 2007.)

The Mechanical Engineering program is accredited by the Engineering Accreditation Commission (EAC), Accreditation Board for Engineering and Technology (ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202, (410) 347-7700.

COURSES IN MECHANICAL ENGINEERING (MENG)

1101. **Introduction to Engineering** (TCCNS = ENGR 1101) 1(0-2)
An introduction to engineering as a career. The major fields of engineering and the typical responsibilities of an engineer are introduced through the use of guest speakers and field trips. Development of skills in teamwork, problem solving, and basic computer applications as related to engineering.
1132. **Engineering Graphics** (formerly ENDR 1133, MENG 1133) 2(2-0)
(TCCNS = ENGR 1204)
Essentials of drafting and blueprint reading: orthographic projections, sectional views, pictorial drawing, geometric and dimensional tolerancing, finishing symbols. Introduction to sketching, computer-aided-drafting, and technical graphs.
1202. **Solid Modeling** (formerly 1203) 2(0-4)
Prerequisite: MENG 1132.
Computer-aided design and problem solving. Use of solid modeling to work with the concepts associated with the design of such machine elements as nuts, bolts, chains, and gears.
2104. **Electric Circuits** (TCCNS = ENGT 1409) 4(3-2)
Prerequisite: MATH 1433 or 1534. PHYS 2644 is recommended.
Units, electric fields, DC series and parallel circuits, Kirchhoff's Laws, network analysis, and AC circuits.
2113. **Statics** (TCCNS = ENGR 2301) 3(3-0)
Prerequisites: PHYS 1624, MATH 1634.
A study of forces and force systems, resultants and components of force systems, forces due to friction, conditions of equilibrium, and forces acting on frame structures.
2133. **Engineering Economics** (formerly 2413, 4213) 3(3-0)
Prerequisite: MATH 1634.

The time value of economic resources such as cash flow diagrams, simple and compound interest, present worth, future worth, equal payment series, and the economic evaluation of engineering projects.

2203. **Thermodynamics** (formerly 3113) 3(3-0)
Prerequisite: MATH 2534.

The fundamental laws of thermodynamics; properties of systems, solids, gases and liquids; and thermodynamic cycles.

2204. **Electronics** 4(3-2)
Prerequisite: MENG 2104.

Introduction to semiconductor devices, basic amplifiers and feedback, symbolic logic, Boolean algebra, basic TTL gates, counters and flip-flops, and shift registers.

2213. **Dynamics** (TCCNS = ENGR 2302) 3(3-0)
Prerequisite: MENG 2113.

Kinematics and kinetics of particles and rigid bodies in plane motion. Work-energy and impulse-momentum principles.

2223. **Mechanics of Solids** (formerly 2103, 3103) (TCCNS = ENGR 2332) 3(3-0)
Prerequisite: MENG 2113.

Analysis of structures using stress-strain diagrams, generalized Hooke's law, stress and strain due to axial, torsional, shear, and flexural loads.

3001. **Independent Study** 1 semester hour
Directed, intensive study in a mechanical engineering subject specified by the instructor.

3002. **Independent Study** 2 semester hours
Directed, intensive study in a mechanical engineering subject specified by the instructor.

3003. **Independent Study** 3 semester hours
Directed, intensive study in a mechanical engineering subject specified by the instructor.

3104. **Fluid Mechanics** (formerly 4103) 4(3-3)
Prerequisite: MENG 2203. Co-requisite: MATH 3433.

Fundamental principles of fluid mechanics. Properties of fluids. Fluid statics. Control volume and transport theorem. Bernoulli's equation. Continuity, momentum, and energy equations. Inviscid and viscous flows. Laminar and turbulent flows. Incompressible and compressible flows. Internal and external flows. Companion lab.

3114. **Materials Science** (formerly 2214) 4(3-3)
Prerequisites: MENG 2223 and CHEM 1143.

Study of the physical and mechanical characteristics of materials, and the effects of chemical composition, mechanical treatment, and thermal or heat treatment upon material properties. Companion lab.

3123. **Measurements and Instrumentation** (formerly 3223) 3(2-3)
Prerequisites: MENG 2204, and MATH 3433 or concurrent enrollment therein.

Fundamentals of measurement systems, standards, treatment of data, statistics, uncertainty analysis, data acquisition, transducers, strain, force, acceleration, pressure, temperature, and fluid flow. Companion lab.

3203. **Applied Fluid Power Design** 3(2-2)
 Prerequisite: MENG 3104.
 The fundamentals of fluid mechanics as applied to hydraulic and pneumatic hardware. Mathematical models of pumps, motors, pistons, accumulators, valves and transmission lines. Design and analysis procedures for implementing total fluid power systems with high operating efficiencies and adequate dynamic response. Companion lab.
3212. **Introduction to Engineering Design** 2(2-0)
 Prerequisites: MENG 1202 and ENGL 3203. Co-requisite: MENG 2133.
 Introduction to the concepts of engineering design and problem solving. Course emphasizes creative and critical thinking, project planning, design functionality, design economics, ethics, technical reporting techniques, computer graphics skills, and team design project activities.
3233. **Mechanisms** (formerly 3222) 3(3-0)
 Prerequisite: MENG 2213.
 Kinematic and dynamic analysis of mechanical devices and machines. Displacement, instantaneous center of zero velocity, velocity and acceleration of linkages, cams, and gear trains. Introduction to synthesis of mechanisms. Design and computer problems.
3234. **Heat Transfer** (formerly 4233) 4(3-3)
 Co-requisite: MENG 3243.
 Fundamental laws relating to heat transfer, including steady and transient conduction, convection, and radiation. Introduction to heat exchanger design. Experimental and computational methods. Companion lab.
3243. **Computer Aided Engineering** (formerly 3143) 3(2-3)
 Prerequisites: MENG 1202, 2223, and 3104. Co-requisite: MENG 3234.
 An introduction to the Matlab software and its programming tools. Introduction to Finite Elements through Solid Works simulation. Topics include static loads, frequency response, buckling of beams, and fatigue analysis. Study of LabView software. Topics include arrays, while and for loops, case structures, shift register, and sequence locals. Companion lab.
4122. **Machine Control Programming** 2(1-2)
 Prerequisite: MENG 3203.
 Logic controller programming with an emphasis on motor control using variable speed drives. Also includes CAM programming using software and CNC equipment. Companion lab.
4123. **Mathematical Methods for Engineers** 3(3-0)
 Prerequisite: MATH 3433.
 The use of Fourier series, linear algebra, transforms, and other advanced mathematical methods for solving engineering problems.
4134. **Dynamics of Machines** (formerly 4133) 4(3-3)
 Prerequisite: MENG 3233.
 Kinematics and kinetic analysis of common machines and machine elements. Vibration isolation, balancing, critical speed, flywheel design, and dynamic measurement. Design and computer problems. Companion lab.
4143. **Senior Design I** 3(1-4)
 Prerequisites: Completion of all required MENG 3000-level courses or permission of instructor.

Coursework emphasizes creative and critical thinking, planning, design, team work, and project management. This course integrates knowledge gained from most of the required courses in a major design project. Students will design, build, and formally present their completed projects to a panel of professional reviewers. Ideally students will ideally work on projects from local industry. If such projects are not available, the students or the instructor may propose projects. Complex projects can be carried to the next design course.

4203. Mechanical Engineering Analysis 3(3-0)

Prerequisite: MENG 4123.

Mathematical modeling, simulation, and statistical analysis of engineering systems and problems.

4243. Senior Design II 3(1-4)

Prerequisite: MENG 4143.

A continuation of MENG 4143.

4253. Control Systems (formerly 4113) 3(3-0)

Prerequisite: MENG 4123. Co-requisite: MENG 4203.

Feedback control of mechanical systems. Emphasis on thermal, fluid, and motion systems under feedback control. Topics include programmable logic controllers, PID control, Laplace transforms, system modeling and performance analysis, stability theory, s-plane, and root locus and/or frequency-based design. Design and computer problems.

STATISTICS

Associate Professor: Schmitter

Professor Emeritus: Hinds

The College of Science and Mathematics offers courses in statistics.

COURSES IN STATISTICS (STAT)

3573. Probability and Statistics 3(3-0)

Prerequisite: MATH 1233 or 1534.

Descriptive analysis, probability, variability, confidence intervals, hypotheses testing, analysis of variance, correlation and regression, and nonparametric statistics.

3584. Statistical Quality Control (formerly 3583) 4(4-0)

Prerequisite: MATH 1634.

Descriptive statistics, probability and hyper geometric, binomial, Poisson, and normal distributions, confidence intervals, hypothesis testing, and correlation and regression. Control charts, tolerance limits, reliability, and process capability.

3593. Design of Experiments 3(3-0)

Prerequisite: STAT 3573.

Basic ideas of experimental design, completely randomized design, randomized block design, Latin squares, factorial designs, confounding, factorial replication, and incomplete block designs.