

LAMAR D. FAIN COLLEGE OF FINE ARTS

Ronald D. Fischli, Dean (Fain Fine Arts Center B128)

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

The primary purpose of the Lamar D. Fain College of Fine Arts is to equip students with the knowledge and skills necessary to pursue a career in art, mass communication, music, or theatre. 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.

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 challenged to evaluate the quality of what they have created, to assess the effect of their 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 College of Fine Arts adopts a twofold mission designed to produce graduates who are both competent professionals and sensitive, reliable, constructive citizens.

ART

Richard Ash, Chair

Professors: Ash, Goldberg, Yarosz

Associate Professor: Davis

Assistant Professor: Barber

Instructor: Hayes

Professor Emeritus: Crossnoe

Three degree programs are offered for art majors:

Bachelor of Fine Arts degree

Bachelor of Fine Arts degree (with Teacher Certification), see page

Bachelor of Arts degree

Non-majors may enroll in studio courses with the consent of the instructor.

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

48 hours

Art Requirements

84 hours

15 hours of basic art courses including 1113, 1123, 1313, 1323, and 1413

12 hours of Art History from 3413, 3423, 4433, 4443, and 4913

Painting 2313

Photography 2013

Printmaking 2153

Ceramics 2613
Metals & Jewelry 2813
Sculpture 2523
Drawing III 2213 or Drawing IV 3313
Exhibition and Presentation Methods 4513
12 additional hours in a major studio emphasis
9 additional hours in a minor studio emphasis
9 additional hours advanced art
A senior exhibition of work (Art 4923) is required prior to graduation.

132 hours

BACHELOR OF FINE ARTS WITH TEACHER CERTIFICATION degree requirements

The requirements for the Bachelor of Fine Arts degree with Teacher Certification are as follows:

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

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 (see page)

Art Requirements

All students selecting a major or minor in the B.A. degree program must have their schedule approved in advance of registration by the Art Chair.

Major (36 semester hours)

ART 1113, 1123, 1313, nine hours art history, and 18 additional hours, with a total of 21 advanced hours. The 18 additional hours should be composed of a variety of studio disciplines.

A minor may be chosen in any field of interest. The minor must be approved by the student's adviser.

REQUIREMENTS FOR A MINOR IN ART (18 semester hours)

ART 1113 or 1123, ART 1313, three hours of advanced art history, and nine additional hours, with a total of 12 advanced hours.

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

COURSES IN ART (ART)

1113. **Design I** 3(2-4)
Fundamental principles of 2-dimensional design. Construction, presentation, and painting skills developed.
1123. **Design II** 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.

1213. Art Appreciation, Applied 3(2-2)

Hands-on opportunities in basic 2- and 3-dimensional media, such as drawing, painting, printmaking, ceramics, and sculpture, together with the usual foundation lecture experience in art appreciation. For non-art majors.

1313. Drawing I 3(2-4)

Drawing a variety of subjects in various drawing media with emphasis on black and white visual organization and expression.

1323. Drawing II 3(2-4)

Prerequisite: ART 1313.

Continuation of 1313 with emphasis on color and individual development.

1413. Art Appreciation 3(3-0)

Lectures, slides, and discussion of the visual elements and their application to the arts. Prerequisite for all art history courses.

2013. Photography I 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 3(2-4)

Prerequisites: ART 1113, 1123, 1323 or consent of instructor.

Introduction to printmaking. Beginning instruction in one of the following printmaking media: intaglio, dealing with etching, aquatint, softground, and relief printing methods applicable to the intaglio process; lithography, dealing with stone and metalplate printing; and screen process printing (serigraphy) dealing with photo-methods; unique prints; monoprint processes.

2213. Drawing III 3(2-4)

Prerequisite: ART 1313 or 1323 or consent of the instructor.

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

2313. Painting I 3(2-4)

Prerequisites: ART 1113, 1123, 1323 or consent of the 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.

2323. Painting II 3(2-4)

Prerequisite: ART 2313.

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

2513. Three-Dimensional Design 3(2-4)

Basic design principles applied to three-dimensional space. Emphasis on the development of the problem-solving process in a wide variety of media.

2523. Sculpture I 3(2-4)

Prerequisites: ART 1113, 1123, 1323 or consent of instructor.

Introduction to sculpture. Emphasis on exploration of a medium through the proper use of appropriate tools and

working processes. Beginning instruction in one of the following sculpture media: steel fabrication, involves oxyacetylene and arc welding; casting, involves mold making in sand and plaster, pattern making in wax and styrofoam, substitution materials in concrete, plaster, and bronze; woodworking, involves use of power and hand equipment.

2613. Ceramics I 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.

2623. Ceramics II 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.

2713. Commercial Art I 3(2-4)

Prerequisites: ART 1113, 1123, 1323 or consent of instructor.

Introduction to commercial art. Beginning instruction in one of three main areas: graphic design, typography, and advertising design. Design, layout, and computer skills will be used in publication and symbol design.

2723. Commercial Art II 3(2-4)

Prerequisite: ART 2713 or consent of instructor.

Continuation of Commercial Art I. Problems in concept development and visual expression in editorial and corporate design.

2813. Metals & Jewelry I 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. Rivets, soldering, piercing, and die forming are among the techniques covered. Also various surface treatments will be explored including etching, stamping, and roll milling. Emphasis on design and craftsmanship.

2823. Sculpture II 3(2-4)

Prerequisite: ART 2523 or consent of the instructor.

Introduction to a second sculpture medium with emphasis on skill development and individual exploration of ideas. (See Sculpture 2523 for media options.)

3013. Photography II 3(2-4)

Prerequisite: ART 2013 or consent of the 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 the 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.

3143. Printmaking II 3(2-4)

Prerequisite: ART 2153 or consent of instructor.

Introduction to a second print medium: intaglio, lithography, or serigraphy emphasizing color printing. (See

Printmaking 2153 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.)
- 3313. Drawing IV** 3(2-4)
Prerequisites: 15 studio hours or consent of the instructor.
The development of personal attitudes towards drawing. Designed to deal with individual problems and concepts.
- 3333. Painting III** 3(2-4)
Prerequisite: ART 2323 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 Art, Ancient Through Late Middle Ages** 3(3-0)
Prerequisite: ART 1213 or 1413.
Survey illustrating the development of European painting, sculpture, and architecture from pre-historic times to the Gothic Era (c. 5000 B.C.-c. 1400 A.D.).
- 3423. History of Art, Renaissance Through Rococo** 3(3-0)
Prerequisite: ART 1213 or 1413.
Survey illustrating the development of European painting, sculpture, and architecture in Western Europe from the Proto-Renaissance to the Rococo (13th century to 18th century).
- 3613. Ceramics III** 3(2-4)
Prerequisite: ART 2623 or consent of the instructor.
Selected studio problems in handbuilding and throwing techniques with an emphasis on the combining of the two techniques. An understanding of ceramic raw materials and basic glaze will be developed.
- 3623. Sculpture III** 3(2-4)
Prerequisite: ART 2823 or consent of instructor.
Advanced study in a previously enrolled medium or introduction to a third medium with emphasis on continued individual exploration and skill development. (See Sculpture 2523 for media options.)
- 3633. Sculpture IV** 3(2-4)
Prerequisite: ART 3623 or consent of instructor.
Advanced study in a previously enrolled medium with emphasis on combining media. Stressing individual development of ideas and a refinement in techniques and skills. (See Sculpture 2523 for media options.)
- 3713. Commercial Art III** 3(2-4)
Prerequisite: ART 2723 or consent of instructor.
Design and production using computerized type. Design as a means of visual and verbal communication will be explored.
- 3723. Commercial Art IV** 3(2-4)
Prerequisite: ART 3713 or consent of instructor.
Design and production of books, brochures, and posters utilizing computerized Macintosh equipment.

3813. **Metals & Jewelry II** 3(2-4)
Prerequisite: ART 2813 or consent of the instructor.
The continued development of metalsmithing skills in various non-ferrous metals with a focus on one of the following metalsmithing techniques: raising; casting; enameling. Particular emphasis placed on design and craftsmanship.
3823. **Metals & Jewelry III** 3(2-4)
Prerequisite: ART 3813 or consent of the instructor.
Introduction to a second metalsmithing technique with an emphasis on continued individual exploration and skill development. (See Metalsmithing 3813 for media options.)
4013. **Photography IV** 3(2-4)
Prerequisite: ART 3023 or consent of the instructor.
This course will explore color photography as a fine arts medium. Experimental approach to color will be explored. These approaches will include: Cliche vere, non silver, dye transfer, and electronic imaging.
4023. **Photography V** 3(2-4)
Prerequisite: ART 4013 or consent of the 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 individual creative path culminating in a final portfolio. May be repeated for credit.
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.
4303. **Foundations of Art I** 3(2-4)
A study of art philosophy. Art problems in both two and three dimensional work in various media. Readings and research in art.
4313. **Painting IV** 3(2-4)
Prerequisite: ART 3333.
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 II** 3(2-4)
A study of the philosophy, organization, and theory related to art programs with focus on skills, knowledge, readings, observation, and research in historical and contemporary trends in art.
4433. **History of Art: Contemporary I** 3(3-0)

Prerequisite: ART 1213 or 1413.

Detailed survey illustrating the development of painting, sculpture, and architecture in Western Art during the late eighteenth and nineteenth centuries.

4443. History of Art: Contemporary II 3(3-0)

Prerequisite: ART 1213 or 1413.

Detailed survey illustrating the development of painting, sculpture, and architecture in Western Art during the twentieth century.

4513. Exhibition and Presentation Methods 3 semester hours

Prerequisites: 21 studio hours or consent of instructor.

A practicum in the fundamentals of exhibition organization. Emphasis on gallery installation and advanced presentation skills beyond the studio experience. Must be taken prior to enrolling in Senior Exhibition 4923. May be repeated for credit.

4523. Ceramics IV 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 4523 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.

4623. Sculpture V 3(2-4)

Prerequisite: ART 3633 or consent of instructor.

Further emphasis in individual development of forms and techniques stressing production of works to be included in the Senior Exhibition. May be repeated for credit.

4713. Commercial Art V 3(2-4)

Prerequisite: ART 3723 or consent of instructor.

Introduction to advertising design. Problems of design and production in a variety of advertising media.

4723. Commercial Art VI 3(2-4)

Prerequisite: ART 4713 or consent of instructor.

Use of illustration, typography, and photography in advertising. Portfolio presentation and development for seniors. May be repeated for credit.

4813. Metals & Jewelry IV 3(2-4)

Prerequisite: ART 3823 or consent of instructor.

Advanced study in a previously enrolled process or an introduction to a third metalsmithing technique with emphasis on combining processes and stressing individual exploration and skill development. (See Metalsmithing 3813 for media options.)

4823. Metals & Jewelry 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. **Advanced Problems in Art** 3 semester hours
 Prerequisites: Nine hours in the field to be investigated.
 Problems to be worked out in conjunction with instructor of the field being investigated. May be repeated for credit when fields of study vary.
4923. **Senior Exhibition** 3 semester hours
 Prerequisites: ART 4513 and consent of instructor.
 Special emphasis on selection and presentation of work for inclusion in the senior exhibition. Includes the design and installation of work and public relation announcements. For B.F.A. majors only. To be taken during final semester. Exhibition scheduling will be determined by the instructor in consultation with the gallery director.
4933. **Visual Arts Apprenticeship** 3 semester hours
 Prerequisite: Consent of instructor.
 Student serves as an apprentice to the instructor in the development of works of art designed by the faculty member. Medium and instructor may not be repeated.
4943. **Art Internship** 3 semester hours
 Prerequisite: Limited to B.F.A. majors of senior standing with 3.0 overall grade point.
 Practical work experience in an environment related to the student's art career objectives. A minimum of 160 hours on the job is required. Must be approved and arranged prior to registration and receive consent of the Program Chair. May be repeated in a different work experience for a total of six hours credit.

MASS COMMUNICATION

Carla Bennett, Chair

Assistant Professors: Bennett, Gorham, Pruitt, Sernoe

Professors Emeriti: Allen, Cowart, Kable

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

Academic Foundations and Core Curriculum (see page)

Mass Communication Requirements (45 semester hours)

Mass Communication (24 semester hours) 1113, 3123, 3213, 3223, 3313, 3613, 4123, 4163 (one semester working either on *The Wichitan* or at MSU2)

Journalism (9 semester hours) 1233, 1243, 4643;

Speech Communication (9 semester hours) 1233, 4133, 3023 or MCOM 4663;

Art (3 semester hours) 2013 or 3713.

A student majoring in Mass Communication must select a minor from one of the following:

Journalism (18 semester hours)

3133, 3233, 3623, 3633, 3653, 4123.

Broadcast Journalism (18 semester hours)

Journalism 3623, 4123, Mass Communication 4153, 4263, 4313, 4363.

Theatre (18 semester hours)

2533, 3433, 3473, 3483, 3543, 4483.

Art (18 semester hours)

1113 or 1123, 1313, 3013 or 3 hours of advanced commercial art, 3 hours of advanced art history, plus 6 advanced hours approved by the Art Chair.

Public Relations (18 semester hours)

JOUR 3133, 3233, 3633 or 3653, 4123, 4683, 4693.

Electives (sufficient to bring total hours to 124)

A 3.0 grade point average in major and minor is required prior to enrollment in Mass Communication 3123.

Minor in Mass Communication--21 semester hours comprised of:

JOUR	1233	Introduction to Mass Communication
MCOM	1113	Media Writing
JOUR	1243	News Writing I
MCOM	3223	Advertising
MCOM	3313	Studio Procedures I
JOUR	4643	Mass Communication Law or MCOM 4313 Media Management
JOUR	4683	Public Relations or SPCH 4133 Organizational Communication

COURSES IN MASS COMMUNICATION (MCOM)

1113. Media Writing 3(3-0)

Introduction to writing skills necessary to gather and disseminate news and information pieces common to communication fields. Emphasis on structure, Associated Press style, journalistic techniques, and print and broadcast formats. Must earn a "C" or better before entering JOUR 1243 or MCOM 4263.

2213. History and Aesthetics of Film (formerly 3213) 3(3-0)

The history, theory, and aesthetics of film as artistic expression. Lighting, composition, editing, continuity, and genres will be emphasized.

3123. Senior Production 3(3-0)

Prerequisites: MCOM 3313, 3613, and JOUR 1243. Limited to mass communication majors with a 3.0 G.P.A. in major and minor.

The execution of a television documentary incorporating written, oral, and organizational skills. Emphasis on applied media aesthetics. To be taken in final long semester.

3223. Advertising 3(3-0)

Study of the means of marketing ideas, goods, and services. Emphasis on principles, procedures, and techniques employed in the creation of campaigns.

3313. Studio Procedures I (formerly 2313) 3(3-0)

The theory and practice of television production and procedures. Supervised direction in all aspects of this media presentation.

3613. Studio Procedures II (formerly 2613) 3(3-0)

Prerequisite: MCOM 3313. Limited to mass communication majors.

Advanced theory and practice of television production. Supervised direction in all aspects of media presentation.

4123. Radio and Television Programming 3(3-0)

Prerequisite: Limited to mass communication majors.

Study of radio and television program design and audience analysis, with emphasis on current programming practices and promotional techniques.

4153. Broadcast Diction 3(3-0)

Prerequisite: SPCH 1233.

The application of the International Phonetic Alphabet to improve the vocal processes, articulation, and pronunciation. Extensive reading of broadcast copy.

4163. Practicum in Mass Communication 3 semester hours

Prerequisite: Consent of instructor.

Writing for campus newspaper and/or campus television station in a professional atmosphere. May be repeated once for credit.

4173. Problems in Mass Communication 3 semester hours

Prerequisite: Consent of chair. Limited to mass communication majors.

Directed research in mass communication.

4263. Broadcast News 3 semester hours

Prerequisites: MCOM 1113 (C or better), 3313, 3613. Limited to mass communication majors.

Gathering, writing, and presenting a television news product under a deadline. Developing news judgment as well as an understanding of the complexities of the visual aspect of broadcast journalism.

4313. Media Management 3(3-0)

Prerequisites: 12 advanced hours or consent of the instructor.

The financial, legal, and technical aspects of handling media personnel. Practical application of station operation, administration, and programming.

4363. Advanced Broadcast News 3 semester hours

Prerequisite: MCOM 4263. Limited to mass communication majors.

The application of broadcast journalism in the role of news producer, news director, and other managerial roles. Responsible for on-air quality of the newscast.

4663. International Communication 3(3-0)

Prerequisite: Junior or senior standing.

A survey of concepts, issues, and developments in the field of international communication. Will encompass the international economic, political, and structural contexts in which the communication and information industries and nation states interact.

JOURNALISM

The requirements for the minor in journalism are as follows:

Minor in Journalism (18 semester hours)

MCOM 1113, JOUR 1233, 1243, 3133, 3233 plus three advanced JOUR hours.

COURSES IN JOURNALISM (JOUR)

1233. Introduction to Mass Communication 3(3-0)

Survey of the media of mass communication: newspapers, radio, television, magazines, and industrial publications.

1243. **News Writing I** 3(2-2)
Prerequisite: MCOM 1113 with C or better.
Introduction to fundamentals such as accuracy, brevity, clarity, deadlines, news story structure, and the nature of the news. Designed to prepare the student for reporting.
3133. **News Writing II** 3(2-2)
Prerequisite: JOUR 1243 or consent of instructor.
Study and practice in reporting the significant and complex news such as science, labor, the courts, and critical reviews. Public affairs and investigative reporting.
3233. **News Editing and Copy Reading** 3(3-0)
Prerequisites: JOUR 1243 and 3133 or consent of instructor.
Instruction and practice in copy reading, determining news values, use of stylebook, headline writing, photo editing, and newspaper design.
3623. **Mass Communication History and Ethics** 3(3-0)
Prerequisites: 12 hours of journalism or consent of instructor.
Study of the development of American newspapers and other mass communication media related to the political, economic, and social progress of the American people; case history approach to ethical problems of the media.
3633. **Editorial Writing** 3(3-0)
Prerequisites: 12 hours of journalism or consent of instructor.
Study and practice of editorial writing techniques. Role of the editorial in contemporary journalism. Organization of facts for interpretation and persuasion.
3653. **Feature Writing** 3(3-0)
Prerequisites: 12 hours of journalism or consent of instructor.
Procedure in gathering material for feature stories with emphasis on newspaper articles. Analysis of reader appeal, study of feature story structure, and development of style by practice in writing feature stories.
4123. **Mass Media Internship** 3 semester hours
Prerequisites: Junior standing and 12 hours of mass communication courses. 3.0 grade point average in mass communication courses.
Instruction and practice in gathering, reporting, and editing the news at a media outlet. A minimum of 120 hours on the job required.
4643. **Mass Communication Law** 3(3-0)
Prerequisites: 12 hours of journalism or consent of instructor.
Study of how law has developed in mass communication with emphasis on freedom of the press vs. rights of the individual; case history approach to court decisions and to Federal Communication Commission rulings.
4683. **Public Relations** 3(3-0)
Prerequisites: 12 hours of journalism or consent of instructor.
Study of public relations in modern society, business, and communications. Influencing public opinion through acceptable performance and two-way communication.
4693. **Case Studies in Public Relations** 3(3-0)
Prerequisite: 4683 or consent of instructor.
Application of public relations principles to cases; analysis of case histories, and evaluation of major public relations campaigns.

PUBLIC RELATIONS

The requirements for the minor in public relations are as follows:

Minor in Public Relations (21 semester hours)

MCOM 1113, JOUR 1243, 3133, 3233, 3633 or 3653, 4683, 4693.

SPEECH COMMUNICATION

The requirements for the minor in speech communication are as follows:

Minor in Speech Communication (18 semester hours)

Speech Communication 1133, 1233, 2133, 3013, 3023, 4133.

COURSES IN SPEECH COMMUNICATION (SPCH)

1133. **Fundamentals in Speech Communication** 3(3-0)
Development of skills in speech communication. Preparation and delivery of speeches. Study of nonverbal communication, psychological motivation, and one-to-one communication.
1233. **Voice and Diction** 3(3-0)
Examination of the structure of the vocal apparatus. Analysis of the sound system of the English language. Work on the speaking voice and on General American pronunciation. Emphasis on the International Phonetic Alphabet and on oral practice.
2133. **Oral Interpretation** 3(3-0)
Analysis of oral interpretation as an art. Consideration of the aim of the interpreter as finding the meanings in the literature and stirring those meanings in the minds of the listeners. Same as Theatre 2133.
3013. **Argumentation and Debate** 3(3-0)
Foundations of argumentative discourse. Emphasis on the construction and delivery of logical arguments and development of skills in critical thinking.
3023. **Persuasion** 3(3-0)
Prerequisite: 1133 or consent of the instructor.
Advanced study and analysis of persuasive principles with a special emphasis on practical application.
4133. **Organizational Communication** 3(3-0)
A study of communication patterns in a range of business and professional organizational environments. Dynamics of individual and group communication-information flow, attitude change, evaluations systems, socio-emotional climate, conflict resolution, and interviewing.
4143. **Problems in Speech Communication** 3 semester hours
Prerequisite: Consent of the chair.
Directed research in speech. May be repeated for credit when topics vary.

MUSIC

Ron Hough, Chair

Professors: Hough, Maxwell, Wiest

Associate Professors: L. Archambo, Lewis, Morrow,

Assistant Professors: Black, Crews, Jones

Professors Emeriti: I. Boland, W. Boland, Hughes

The following degree programs are offered for music majors:

Bachelor of Music (Performance)

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

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 performance majors, 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.)

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

Additional information regarding Music Program policies and procedures is available in the Music Program 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 performance 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 two 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. 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 Program Chair upon the student's entrance into the music program.

Grading will be by pass/fail. Attending a specific 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. Part-time students will be required to attend an amount which is in ratio to the number of hours in which they are enrolled.

Music majors must pass a minimum of eight semesters. Students will not be cleared for graduation until these requirements are met.

REQUIREMENTS FOR THE MINOR IN MUSIC (23-24 semester hours):

All students selecting a minor in music must have their program approved in advance of registration by the Music Minor Adviser.

Music 1000 (4 semesters), 1601/1603, 3723, and 3733 or 3743, 2 semester hours from 1111 Beginning Piano or 1121 Piano Class (keyboard students take MUSC 3823 Piano Pedagogy I (offered fall semester only); Major Ensemble (4 semesters), 4 semester hours primary performance area (must be concurrently enrolled in major ensemble), 3-4 semester hours from the following: 1611/1613, 3733, 3743, 4813, 4823, 4843, or 4893. Nine hours of the minor must be at the advanced level (3 advanced hours may be taken in upper-level ensemble).

REQUIREMENTS FOR THE BACHELOR OF MUSIC DEGREE:

Primary Performance Areas: Brass, Percussion, Woodwinds, Guitar, Voice, Organ, or Piano

MUSIC CORE REQUIREMENTS (required of all music majors) 37-38 hours

Recital Attendance (eight semesters)

Music Theory (18 hours) - MUSC 1601/1603, 1611/1613, 2603, 2613, 3632, and 3662.

Music History (9 hours) - MUSC 3723, 3733, and 3743.

Conducting (3 hours) - MUSC 4843.

Ensemble (Performance Majors - 8 hours, Teacher Certification - 7 hours)

PERFORMANCE MAJORS - ADDITIONAL REQUIREMENTS

Academic Foundations and Core Curriculum	48 hours
Music Requirements:	
Instrumental Performance	45 hours
MUSC 4853	3
Primary Performance Area (12 adv.)	24
Secondary Performance Area with Proficiency (4 sem.)	4
Secondary Ensemble (4 sem.)	4
Advanced Music Electives	10
Total hours	124
Vocal Performance	52 hours
MUSC 1211, 1221, 3211, 3221, 4833, and 4862	9
Primary Performance Area (12 adv.)	24

Performance Class 1101 (2 sem.), 3101 (2 sem.)	4
Opera Workshop 1931 (2 sem.), 3931 (2 sem.)	4
Advanced Music Electives	3
Foreign Language (2 semesters of French or German - can be met by Academic Core Requirements)	8

Total hours **129-131**

Keyboard Performance **48-49 hours**

MUSC 3823, 3833, 3842, 3852, and 4853 or 4862	12-13
Primary Performance Area (12 advanced)	24
Secondary Performance Area (2 semesters must be keyboard)	4
Advanced Music Electives	8

Total hours **125-128**

MAJORS SEEKING TEACHER CERTIFICATION - ADDITIONAL REQUIREMENTS

Academic Foundations and Core Curriculum for Teacher Certification 48 hours

Professional Education Requirements, see page 21 hours

Music Requirements - All Level Teacher Certification

Vocal Emphasis **27 hours**

MUSC 1211, 1221, 3141, 3161, 3181, 3291, 3862, 3872, 4823, 4862, and 4873.	18
Primary Performance Area (3 advanced)	7
Advanced Music Electives	2

Total hours **133-135**

Instrumental Emphasis **27 hours**

MUSC 3141, 3161, 3181, 3281, 3291, 4823, 4853, and 4873.	14
Primary Performance Area (3 advanced)	7
Advanced Music Electives	6

Total hours **133-135**

COURSES IN MUSIC ENSEMBLE (MUSC)

The term “major ensemble” as used in the curricula includes University Symphonic Band or University Marching Band for students concentrating in instrumental music and University Singers for students concentrating in vocal music. Students concentrating in keyboard music may select from any of the major ensembles mentioned above. Ensembles other than University Symphonic Band, University Marching Band, and University Singers are considered “secondary.”

1001, 3001. **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 (fall and spring semesters).

1011, 3011. **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. The ensemble presents one concert each semester (fall and spring semesters).

1021, 3021. **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, who qualify by audition (spring semester).

1031, 3031. **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, 3041. **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 one kinesiology activity course. May be repeated for credit (fall semester only).

1051, 3051. **Wichita Falls Concert Band** 1(0-3)

An instrumental organization open to all interested students and townspeople. The band performs concerts on campus and off campus.

1061, 3061. **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).

1931, 3931. **Opera Workshop** 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, 3941. **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, 3961. **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, 3981. **Midwestern Singers** 1 semester hour

A chamber ensemble selected from members of the University Singers. The Midwestern Singers perform a wide variety of music, ranging from madrigals, classical chamber works, and vocal jazz. Members are selected by audition.

COURSES IN PERFORMANCE (AMUS)

Courses in performance (private lessons) are available for one or three semester hours credit. Performance course numbers have a first digit of 1 or 3 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	23
Organ	24
Harpsichord	28
Keyboard for non-majors/non-minors	72
Percussion	26
Strings	
Harp	30
Guitar	38
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

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

COURSES IN MUSIC (MUSC)

1033. **The Appreciation of Music**

3(3-0)

A course designed to increase the variety and depth of the student's exposure to music and to enhance better

understanding and enjoyment of music as an art. Offered as traditional music appreciation or jazz/rock music appreciation.

1101. Performance Class 1 semester hour

A course designed to cover all aspects of performance relating to the student's performing medium. Where applicable, areas covered will be pedagogy, history, diction, literature, instrument maintenance, interpretation, and stage presence. Meets one hour a week for one hour credit.

1103. Piano Class for Non-Music Majors 3(3-0)

A survey of piano and harpsichord literature from 1685 to the twentieth century. Concurrent class instruction in piano.

1111. Beginning Piano 1(0-2)

Class instruction in piano for students with no previous background; emphasis on the development of fundamental skills. Majors/minors only.

1121. Piano Class 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 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 1 semester hour

Prerequisite: MUSC 1211.

A beginning course for the study of German and French pronunciation. A working knowledge of IPA is expected.

1601. Elementary Sight-Singing and Ear Training 1(0-2)

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 3(3-0)

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 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 3(3-0)

Prerequisite: MUSC 1603.

A continuation of MUSC 1603. MUSC 1611 should be taken concurrently.

2603. Theory III 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 3(3-1)

Prerequisite: MUSC 2603.

A continuation of MUSC 2603.

3101. Performance Class 1 semester hour

A continuation of MUSC 1101.

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 which 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 semester hour

Group instruction and practice in the fundamentals of singing such as breath control, tone production, consonant formations, etc. Individual assignments as indicated by the student's own problems, background, and ability.

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.

3662. Orchestration 2(2-0)

Prerequisite: MUSC 2613.

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.

3723. Music Literature 3(3-0)

A survey of music through periods, composers, and genres. Study of traditional western European art and folk music and music of diverse cultures, including America, Africa, and Asia. Emphasis will be given to the development of study skills necessary for further study in music history through analysis and identification of written scores and aural examples. For music majors; open to non-majors as space permits.

3733. Music History I 3(3-0)

A study of the development of music and the related arts from early Greek music through the Baroque period. Recorded illustrations of music show stylistic development of representative composers in each period.

3743. Music History II 3(3-0)

A study of the development of music and the related arts from the classical period through the Twentieth Century. Recorded illustrations of music show stylistic development of representative composers in each period. A sampling of world music will be incorporated.

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.

3823. Piano Pedagogy I 3 semester hours

Principles and materials for the instruction of beginning piano students of all ages. Knowledge of the leading printed teaching methods and anthologies, and application of leveling principles through pedagogical composition assignments. Discussion of studio policies. Some in-class teaching. Two lessons of practice teaching per week required.

3833. Piano Pedagogy II 3 semester hours

Principles and materials for the instruction of intermediate and advanced piano students. Knowledge of the leading printed teaching methods and anthologies, and application of leveling principles through pedagogical composition assignments. Discussion of business practices and studio policies. Some in-class teaching. Two lessons of practice teaching per week required.

3842. Keyboard Literature I 2 semester hours

A survey of keyboard literature from its beginnings through the early Romantic composers. Recorded and student performances of literature used to illustrate various aspects of form and style.

3852. Keyboard Literature II 2 semester hours

A survey of keyboard literature during the Romantic, Impressionist, and 20th-Century eras, coming as close to the present day as possible. Various national styles will be discussed, as will the divergent trends in 20th-Century keyboard music. Recorded and student performances of literature.

3862. Choral Literature I 2 semester hours

Literature, materials, and philosophy of choral literature. Upper level voice standing required.

3872. Choral Literature II 2 semester hours

Continuation of Choral Literature I with an emphasis on standards and procedures for the choral rehearsal. Upper level voice standing required.

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 basic fundamentals of marching and show design. Radio and television script preparation, street parade, pre-game and half-time shows, and mass-band preparation.

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.

4733. The Art Song 3(3-0)

Prerequisite: Junior or senior level voice standing.

A survey of the art song from 17th-century Italy to the present, with emphasis on German Lied, French art song, and English and American song of the 19th and 20th centuries. Particular attention will be given to style, interpretation, and diction.

4813. Foundations of Music I 3(3-0)

A study of elementary music education as it relates to musical concepts, music-reading skills, the elements of music, performance, and materials.

4823. Foundations of Music II 3(3-0)

A study and evaluation of music procedures and basic concepts for music programs.

4833. Vocal Pedagogy 3(3-0)

Prerequisite: Consent of instructor.

A study of the principles and techniques of teaching voice; including methods and procedures for individual and group instruction. In-class observation and individual 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.

4862. Choral Conducting 2 semester hours

Prerequisite: MUSC 4843.

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

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

A course designed for music majors working toward the all-level certificate 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. Includes laboratory experience in teaching beginning vocal and instrumental techniques individually, in small groups, and in larger classes.

4893. Music Technology 3 semester hours

Prerequisite: Consent of instructor.

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.

4963. **Problems in Music**

3 semester hours

Prerequisite: Consent of Chair.

Directed study on special problems in music. 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. The Chair was endowed to allow Midwestern State University to enhance its high level of pianistic and musical excellence. Past holders of the Bolin Chair were Drs. Peter Armstrong, Julie Bees, and Nancy Boston.

Dr. Ruth Morrow is the current 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 as the Bolin Chair.

THEATRE

Laura Wilson, Chair

Professors: Fischli, Henschel

Associate Professors: Lewandowski, Wilson

Three degree programs are offered for theatre majors:

Bachelor of Fine Arts

Bachelor of Arts

Bachelor of Arts with Teacher Certification

BACHELOR OF FINE ARTS degree requirements

Academic Foundations and Core Curriculum (see page)

Theatre Requirements (65 semester hours)

General Requirements (14 semester hours)

SPCH 1233, THEA 2121, 2133, 3121 (7 hours or every semester enrolled as a theatre major)

History/Theory (6 semester hours)

4433 and 4443

Acting/Directing (18 of the following 21 semester hours)

1413, 2533, 3123, 3423, 3433, 3543, 4483

Technical Theatre (21 of 24 semester hours)

Required: 1513, 1613, 1713

12 hours from 3463, 3473, 3483, 4463, 4473

Plus six advanced hours chosen from the following:

THEA 3453, 3513, 3543, 4143, 4213, 4423, or any upper level, adviser-approved courses.

Electives (12 semester hours)

BACHELOR OF ARTS degree requirements

Academic Foundations and Core Curriculum (see page)

Theatre requirements (42 semester hours)

SPCH 1233, THEA 1413, 1513, 1613, 2133, 2533, 3433, 3543, 4483; one hour of 2121, five hours of 3121; three semester hours from 3423, 3463, 3473, 3483, 4463, or 4473; three semester hours from 4433 or 4443; plus three advanced hours.

The requirements for the minor in theatre are as follows:

Minor in Theatre (18 semester hours)

SPCH 1233, THEA 1513, 1613, 2533, 3433, and three semester hours from 3423, 3463, 3473, 3483, or 4463.

BACHELOR OF ARTS WITH TEACHER CERTIFICATION degree requirements

See page .

COURSES IN THEATRE (THEA)

1413. **Movement for Stage** 3(3-0)
The use of improvisational techniques to explore the coordination of physical and vocal expression.
1503. **Appreciation of Theatre** 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. **Scene Construction** 3(2-2)
Constructing, finishing, and painting scenery and properties for stage, studio, and display.
1613. **Performance Makeup** 3(3-0)
Principles of straight and character makeup for camera and live audience.
1713. **Introduction to Theatrical Design** 3(3-0)
Exploration of the principles of theatrical design and basic drawing skills as forms of artistic communication.
2121. **Rehearsal and Production** 1 semester hour
Laboratory in theatre productions. Participation in the performance or production of at least two plays involving the successful completion of assigned tasks.
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.
2133. **Oral Interpretation** 3(3-0)

Analysis of oral interpretation as an art. Consideration of the aim of the interpreter as finding the meanings in the literature and stirring those meanings in the minds of the listeners. Same as SPCH 2133.

2533. Introduction to Acting 3(2-2)

Open to non-majors. May be repeated for credit. Study and application of the theories and techniques of the art of acting with emphasis on acting as a communicative process.

3121. Advanced Rehearsal and Production 1 semester hour

Prerequisite: THEA 2121.

Developmental experiences in performance or production beyond THEA 2121 associated with the semester's productions. May be repeated for credit.

3123. Advanced Movement 3(3-0)

Exploration of advanced techniques in stage movement.

3423. Script Analysis for Theatre Performance and Design 3(3-0)

The skills and techniques of script analysis. The analyzing and practical application of the production and performance values in a playscript.

3433. Principles of Directing 3(2-2)

Prerequisites: 2533 and 3543, or consent of the instructor.

Fundamental principles and aesthetics of directing. Criteria and procedures in selection, casting, rehearsal, and production. Practice in directing scenes.

3453. Scene Construction 3(2-2)

Exploration of advanced sceneographic techniques.

3463. Scene Design 3(2-2)

Prerequisites: 1513 and 3483 or consent of instructor.

Study and practice in scenic design principles.

3473. Performance Lighting 3(2-2)

Study and practice in lighting theories. Principles of electricity as applied to theatre, broadcast, and concert lighting.

3483. Theatre Graphics 3(2-2)

Prerequisite: 1513 or consent of instructor.

Principles of and practices in drafting and drawing for the performing arts. Application of standard graphic language in scenic design and technical production.

3513. Selected Studies in Theatre 3(3-0)

Topics will vary and may include such subjects as supplementary playreading and analysis, advanced work with voice and dialects, sound design, and special performance studies. May be repeated for credit when topics vary.

3543. Advanced Acting 3(2-2)

Prerequisite: 2533 or consent of the instructor. May be repeated for credit.

Advanced study and application of the theories and techniques of acting with emphasis on characterization, role analysis, and ensemble playing.

4143. Problems in Theatre 3 semester hours

Prerequisite: Consent of the college dean.

Directed research in theatre. May be repeated for credit when topics vary.

4213. Dialects 3(3-0)

Prerequisite: 1233 or consent of the instructor.

General phonetic principles and practice. The regional dialects of the United States: General American, Southern, and Eastern. Standard British speech. Other selected dialects. Same as SPCH 4213.

4423. Creative Dramatics 3(2-2)

The use of story dramatization, role playing, and improvisation for the purpose of developing critical thinking, creativity, and social communication skills in the child. It is designed for prospective teachers of all disciplines.

4433. Theatre History I 3(3-0)

History and theory of playwriting, directing, acting, and production from the beginnings through the eighteenth century.

4443. Theatre History II 3(3-0)

History and theory of playwriting, directing, acting, and production in the nineteenth and twentieth centuries. Special study of the contemporary theatre.

4463. Construction of Stage Costumes 3(2-2)

Techniques in the making of stage costumes, drafting, and adapting of patterns for period and modern clothes for the stage.

4473. Design of Stage Costumes 3(2-2)

Prerequisite: 4463 or consent of the instructor.

Design of costumes for stage.

4483. Direction of Plays (formerly 3443) 3(2-2)

Prerequisites: 2533, 3433, 3543 or consent of the instructor.

Conceptualization, direction, and production of a one-act play for presentation before an audience. Includes responsibility for all performance, design, technical, and promotional aspects of the production.

COLLEGE OF HEALTH SCIENCES

Susan Sportsman, Dean (J. S. Bridwell Hall)

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. Admission requirements for the health science programs are shown below.

1. See the section 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).
3. Application forms for admission to health science programs may be obtained from the respective program office.
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 program chair.
6. Students who use Sheppard AFB facilities will sign a Hold Harmless Agreement prior to entering classes.
7. Students who attend classes at Sheppard AFB or local hospitals are responsible for their own transportation. To meet federal requirements all persons who operate vehicles on Sheppard AFB must carry bodily injury and property damage liability insurance that meets the minimum statutory requirements of applicable civil law and USAF regulations. Students must certify at the time of registration that they possess such insurance if planning to operate a vehicle on Sheppard Air Force Base.

DENTAL HYGIENE

Barbara DeBois, Chair (Gaines Clinic, J.S. Bridwell Hall)

Associate Professor: Davis

Assistant Professors: DeBois, Curran, Crump

Instructors: Baniecki, Blumenfeld, Hyde, Pitruzzello

The Bachelor of Science In Dental Hygiene (127 semester hours)

The Dental Hygiene Program 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 (65 hours) and (2) the dental hygiene courses (62 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 and the Texas State Board of Dental Examiners. 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 out the guidelines and criteria on the eligibility of persons with criminal convictions, mental illness, chemical dependency, and/or infectious diseases to obtain a license as a registered dental hygienist. (Detailed information available from the Texas State Board of Dental Examiners - Rule 101.8 and

109.223.) The profession of dental hygiene is classified as a Category I level (high-risk) profession for bloodborne pathogens, per OSHA standards.

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 an application for admission to the Dental Hygiene Program and most recent transcripts depicting completed courses, as well as courses in progress. (Dental Hygiene applications are obtained from the Dental Hygiene Program office.)
3. Present a minimum cumulative GPA of 2.50 and a minimum science GPA of 2.25 for all semester hour credits attempted pertaining to the BSDH prerequisite and core academic courses.
4. Successfully complete the following courses prior to enrollment in dental hygiene major courses:
 - Dental Hygiene Prerequisites - (21 semester hours)
 - BIOL 1134, 1234, 2333, 3004*
 - CHEM 1203
 - MATH - 3 hours college level (other than remedial)

Note: If BIOL 3004 (Microbiology) cannot be completed prior to enrollment in dental hygiene major courses, it must be taken prior to starting the second year in the Dental Hygiene Program.

Academic Foundations and Core Curriculum - (48 semester hours)

At least 33 hours of the core must be completed prior to entering the dental hygiene program.

ECON 1333 or 2333	Six hours Humanities
ENGL 1113, 1123	Kinesiology 2 Activities (1-4 hours)
Three hours Fine Arts	POLS 1333, 1433
HIST 1133, 1233	PSYC 1103
SOCL 1133	SPCH 1133

General Degree Requirements: Demonstrate computer literacy by taking a proficiency test or earning credit for CMPS 1023 or BCIS 2153.

NOTE: If BIOL 3004 (Microbiology) cannot be completed prior to entering the dental hygiene program, at least 36 hours of the general academic core requirements must be completed.

ADMISSION PROCEDURES

Due to the limited availability of clinical positions, the selection process for admission into the dental hygiene program will be based upon, but not limited to:

GPA of prerequisite courses (cumulative and science)

Number of prerequisite and core courses completed and in progress

Previous dental-related experience

Dental Hygiene Program Application

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 (62 semester hours) Dental Hygiene 3002, 3003, 3005, 3013, 3022, 3023, 3102, 3113, 3114, 3123, 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. 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. 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 II (DNHY 3005), the student must provide documentation of:

1. Program approved student liability insurance.
2. Completion of physical examination.
3. Health insurance.
4. Compliance with state or program mandated immunizations.

Prior to enrollment in Clinical Practice III (DNHY 4018), the student must provide documentation of at least 40 hours of observation in a general practice dental office. Prior work experience can be utilized to meet this requirement.

COURSES IN DENTAL HYGIENE (DNHY)

HSAD 1001. Introduction to Health Sciences 1(1-0)

An introduction to professional career options in the health sciences. Provides opportunities for exploration of a variety of health disciplines to aid students in making career decisions. Begins development of the professional language of the health sciences as a foundation for understanding relevant literature.

3002. Oral Radiology I (formerly 3003; 3004, 2102) 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 (formerly 3002) 3(3-0)

Prerequisites: DNHY 3113, 3114. Concurrent enrollment in DNHY 3005 (Clinical Practice II).

This course focuses on the fundamental knowledge base 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. An examination of common physical and psychological 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/health care provider relationship regarding ethical and legal responsibilities of each.

3005. **Clinical Practice II** (formerly 3006) 5(0-10)
Prerequisites: DNHY 3113, 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)
Properties of the materials used in restorative dentistry and the influence of manipulation upon those properties as related to private practice.
3022. **Histology** (formerly 2003) 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** (formerly 3003; 3004) 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 quality assurance in dental radiography, intra and extraoral film placement criteria, and principles of panoramic radiography.
3113. **Dental Hygiene I** (formerly 2014, 2113) 3(3-0)
Prerequisites: Admission procedures completed or consent of Dental Hygiene Program 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
3114. **Clinical Practice I** (formerly 2012, 2013, 2114) 4(0-8)
Prerequisites: Admission procedures completed or consent of Dental Hygiene Program Chair. Concurrent enrollment in DNHY 3113.
Application of didactic instruction from the course Dental Hygiene I (DNHY 3113) 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).
3123. **Head, Neck, and Dental Anatomy** (formerly 2004, 2123) 3(2-2)
Detailed anatomy of dental structures with special emphasis on human dentition in laboratory sessions 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 to general pathology relating causative factors to clinical manifestations. Study of gross and microscopic lesions of the teeth and related oral tissues. Emphasis placed on degenerative changes, dental caries and its sequelae, periodontal disease, mucous membrane pathology, and neoplasia.

4013. Dental Health Education (formerly 4012) 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, 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. Preparation of terminal and behavioral objectives, curriculum development, and preparation of lesson plans to be used in community projects in Dental Public Health.

4018. Clinical Practice III (formerly 3018) 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 extramural sites in the community. Furthers development of instrumentation and assessment skills acquired in prerequisite Clinical Practice courses on patients of a more difficult caliber. Introduction and development of techniques for pit and fissure sealant placement, ultrasonic scaling, periodontal scaling and root planing, and subgingival irrigation. 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.

4023. Dental Hygiene III (formerly 3012) 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 planing, and gingival curettage. The concepts of decision making are examined to assist students to develop responsibility and accountability 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 skills in obtaining comprehensive patient medical histories. 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)

Prerequisites: 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 the school setting to private practice dental offices

with guest lecturers and discussions on new developments in patient care, resume writing and job interviewing, patient and personal insurance, and legal and ethical decisions 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 assists the students to 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 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. The 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 (formerly 4002)

3(3-0)

Study and exercises concerning the general principles of pharmacology and of pharmaceuticals. Emphasis on pain relieving drugs, antibiotics, and the anesthetics used in dentistry. Includes nitrous oxide - oxygen conscious sedation and management of drug related emergencies.

NURSING

Chair (J. S. Bridwell Hall)

Professor: Sportsman

Associate Professors: Smith, Tickle

Assistant Professors: Bishop, Church, Collins, Distel, Fitzgerald, Flanders, Greene,
Hawley, Johnson, Lockhart, Mezzo, Stewart

Professor Emeritus: Inman

The program offers curricula leading to a Bachelor of Science in Nursing. There are two tracks in the BSN program - a generic program for students who do not have a license to practice as a Registered Nurse and the RN to BSN track for RN's who have graduated from hospital based programs or 2 year associate degree programs.

The undergraduate curriculum (BSN) includes general education courses which provides a foundation for understanding physiological, psychosocial, political and economic factors that may affect a person's health status. In addition, the nursing courses focus on nursing interventions that will provide clients with optimal health status.

The RN to BSN track is a flexible option designed to meet the needs of the working RN. Nursing classes are offered once per week via distance learning methodology and on campus, and clinical experiences may be conducted in the geographical area where the RN student lives.

The BSN program is fully accredited by the National League for Nursing Accrediting Commission and the Board of Nurse Examiners for the State of Texas. The program includes a total of 135 hours (68 hours nursing and 67 non-nursing hours) for the generic student and a total of 124 hours in the RN/BSN track (61 nursing hours and 63 non-nursing hours).

Upon completion of the program, the graduates (generic) are eligible to take the National Council Licensure Examinations (NCLEX) for registered nurses.

RECOMMENDATION FOR LICENSURE

University recommendation for application for RN licensure will be made upon satisfactory completion of the nursing curriculum and satisfactory score on the HESI exit exam (85% or above).

BNE INFORMATION REGARDING ELIGIBILITY TO WRITE NCLEX

The Board of Nurse Examiners for the State of Texas has set out guidelines and criteria on the eligibility of persons with criminal convictions to obtain a license as a registered nurse. The board 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.

The Board of Nurse Examiners for the State of Texas has set out the guidelines and criteria on the eligibility of persons with mental illness and/or chemical dependency to obtain a license as a registered nurse. The board 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 with lack of fitness to practice by reason of mental illness or intemperate use of alcohol or drugs that could result in injury to patients or the public. (Detailed information is available from the Board of Nurse Examiners for the State of Texas or the Chair of the undergraduate Nursing Program.)

ADMISSION INTO THE NURSING MAJOR (BSN, Generic)

The student must:

1. complete an application to the BSN Program;
2. have a cumulative GPA of 2.75 or better on a 4.0 scale prior to enrollment in NURS 3307 based on all semester hours applicable to the BSN degree;
3. complete the following courses before enrollment in NURS 3303: BIOL 1134 and 1234; NURS 3103;
4. complete the following general education courses before enrollment in NURS 3307:
ENGL 1113 and 1123 MATH 1053 OR 1233
BIOL 3004 PSYC 1103
CHEM 1203 SOCL 1133
5. provide documentation of the following prior to enrollment in NURS 3307:
 - a. program approved student liability insurance;
 - b. completion of a physical examination;
 - c. health insurance; and
 - d. compliance with State-mandated and program immunizations.

NOTE: ADMISSION TO NURS 3307 CONSTITUTES FORMAL ADMISSION TO THE BSN PROGRAM (Generic) AND STUDENTS ARE ADMITTED IN THE FALL SEMESTER ONLY.

Major (68 semester hours)

NURS 3103, 3203, 3233, 3303, 3307, 3406, 3407, 3503, 4007, 4017, 4107, 4307, 4403, 4602

ADMISSION INTO THE RN/BSN TRACK

The student must:

1. complete an application for admission to the BSN Program;
2. be licensed as a Registered Nurse (Texas or designated State);
3. have official transcripts from all colleges/universities and/or diploma school of nursing sent to the Office of the Registrar and Admissions;

4. meet criteria established by the BSN Program Admissions, Retention, Progression, and Graduation Committee guidelines and meet TNA Articulation Agreement requirements (Detailed information may be obtained from the Chair, Undergraduate Nursing Program.);
5. have a cumulative GPA of 2.75 on a 4.0 scale or better prior to enrollment in NURS 3303 based on all courses applicable to the BSN degree;
6. complete the following courses prior to NURS 3303:

BIOL 1134, 1234 and 3004	MATH 1053 OR 1233
Chemistry 3 hours	NURS 3203
PSYC 3233	PSYC 1103
ENGL 1113 and 1123	SOCL 1133
7. provide documentation of the following prior to enrollment in NURS 3303:
 - a. professional liability insurance;
 - b. completion of physical examination;
 - c. health insurance;
 - d. compliance with State or program mandated immunizations; and
 - e. current licensure (GN's may be admitted to the RN/BSN track provisionally with the stipulation that they must pass NCLEX prior to completion of the NURS 3303 Assessment course. If they do not pass NCLEX, they will be administratively withdrawn from the course.)

NOTE: ADMISSION TO NURS 3303 CONSTITUTES FORMAL ADMISSION TO THE RN/BSN PROGRAM AND STUDENTS ARE ADMITTED ONCE A YEAR.

Major (28 semester hours)

NURS 3203, 3303, 3705, 3503, 4107, 4307

ADDITIONAL REQUIREMENTS FOR THE BSN DEGREE (Generic)

NURS 3203
 **CMPS 1023, EDUC 1023, or BCIS 2153
 ECON 1333
 Fine Arts 3 hours
 HIST 1133 and 1233
 Humanities 6 hours
 Any 2 different Kinesiology Activity Courses
 POLS 1333 and 1433
 PSYC 3313 or equivalent
 Speech Communication 3 hours

*Transfer courses will be considered on an individual basis.

**This course may be challenged.

ADDITIONAL REQUIREMENTS FOR RN/BSN TRACK (See page Special Academic Programs)

TIME LIMITATIONS

BSN generic students must complete all clinical nursing courses within a four-year period of time beginning with initial enrollment in NURS 3307.

RN/BSN track students must complete all nursing courses within a four-year period of time beginning with initial enrollment in NURS 3303.

TRANSFER POLICY

1. Transfer students must meet the admission requirements of the University and the BSN Program.
2. Progression requirements for these students are identical to those of the MSU BSN Program nursing students.
3. In addition, transfer students must meet the following requirements:
 - a. Nursing courses to be transferred were completed at an NLN or other 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 program to accompany the application form. The students must be in good academic standing and eligible for readmission to the program from which they are transferring.
 - d. Submission of course description and syllabus for each completed nursing course for evaluation to determine that the course is comparable to the MSU nursing course so that credit may be granted. (The student must complete the request for specific course substitution and any other material deemed relevant.)
4. All potential transfer students are reviewed by the BSN Program's Admission, Retention, Progression and Graduation Committee which will make recommendations regarding admission and placement to the Health Sciences College Admission Committee.
5. Transfer credit will be evaluated according to University policy.
6. Students planning to take any general education courses at another college before transferring to the MSU BSN Program should seek guidance from the MSU BSN Program before enrolling in the courses to avoid problems of transferring credit.
7. MSU students who are progressing satisfactorily will be given priority for all classes. Transfer students will be considered on an “as available” basis.

READMISSION/REENTRY POLICY

1. A student seeking readmission 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 any reason must petition in writing the Admissions, Retention, Progression and Graduation Committee prior to re-enrollment. Individual interview with the committee may be required.
3. If the student receives a “D” or “F” in either N3307 (generic) or N3303 (RN/BSN) he/she must seek readmission to the nursing program by petitioning the Admissions, Retention, Progression and Graduation Committee in writing for consideration and have a GPA of 2.75 or better excluding the nursing course which the student did not successfully complete.
4. A student who receives a “D” or “F” in a nursing course (other than N3307 (generic) or N3303 (RN/BSN)) must seek reentry to the nursing program by petitioning the Admissions, Retention, Progression, and Graduation Committee in writing for consideration.
5. If the student receives a second “D” or “F” in the same nursing course, the student will be ineligible for reenrollment or re-entry in this nursing program.
6. 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.
7. Students who have not been enrolled in MSU's BSN Program for 3 or more years will be required to attain a satisfactory score on a comprehensive exam for each nursing course completed before readmission and demonstrate clinical competency in selected nursing procedures.

PROGRESSION POLICY FOR BSN GENERIC AND RN/BSN TRACK

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); and BIOL 3004 (Micro) and chemistry. Failure to attain a minimum grade of C in these courses will prevent the student from progressing in the program. Additionally, the student must attain a minimum of C when repeating the course.
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 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. Students who are formally admitted to the nursing program will not be permitted to progress beyond N3307 if they do not successfully complete NURS/BIOL 3203.
5. If any student withdraws from nursing courses and/or the University, he/she must petition the BSN Program's Admissions, Retention, Progression and Graduation Committee in writing as to their intent prior to re-enrollment.
6. If students are on University scholastic probation, they may not enter N3307: Basic Nursing (generic students) or N3303 (RN/BSN), or progress in the program.
7. Failure to achieve a minimum grade of C when repeating a nursing course results in dismissal from the program and thereby renders the student ineligible to apply to this nursing program.
8. Failure in any two (2) nursing courses (including Pathophysiology and Developmental Psychology) renders the student ineligible for enrollment or re-enrollment in this nursing program.
9. The BSN Program's Admissions, Retention, Progression and Graduation Committee reserves the right to make exceptions to the above due to extenuating circumstances.

COURSES IN NURSING (NURS)

HSAD 1001. Introduction to Health Sciences 1(1-0)

An introduction to professional career options in the health sciences. Provides opportunities for exploration of a variety of health disciplines to aid students in making career decisions. Begins development of the professional language of the health sciences as a foundation for understanding relevant literature.

3103. Theories and Concepts: Introduction to Nursing 3(3-0)

Prerequisite: Sophomore standing in nursing program.

This course is an introduction to major concepts of concern in the discipline of 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, 3004.

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.

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.

3303. Theories and Concepts: Family Health Assessment 3(2-3)

Prerequisites: BIOL 1134 and 1234, NURS 3103 (generic BSN); NURS 3203 and completion of Nursing Program Admission Requirements (RN/BSN).

The focus of this course is on the assessment of the holistic person as an individual member of families, aggregates, communities, and society (IFACS). 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.

3307. Theories and Concepts: Basic Nursing 7(4-9)

Prerequisites: NURS 3303 and completion of Nursing Program Admission Requirements.

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.

3406. Theories and Concepts: Mental Health Nursing 6(3-9)

Prerequisites: NURS 3307 and NURS/BIOL 3203.

Concepts and principles emphasized in this course pertain to 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, aggregates, communities, and societies (IFACS) in structured and non-structured settings.

3407. Theories and Concepts: Family Health Nursing I 7(4-9)

Prerequisites: NURS 3307 and NURS/BIOL 3203.

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 aggregates, communities and society (IFACS), through application of the nursing process.

3503. Theories and Concepts: Nursing Research 3(3-0)

Prerequisites: PSYC 3313 or any undergraduate statistics course; NURS 3307.

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.

3705. Theories and Concepts: Advanced Nursing Seminar 5(4-3)

Prerequisites: Admission to RN/BSN Track and NURS 3303.

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.

4007. Theories and Concepts: Family Health Nursing II 7(4-9)

Prerequisites: NURS 3406 and 3407.

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 more

complex situations with the individual, his/her family, as well as aggregates, communities and society (IFACS), through application of the nursing process.

4017. Theories and Concepts: Family Health Nursing III 7(4-9)

Prerequisites: NURS 3406 and 3407.

The focus is on the application of theories and concepts used by the nurse to assist families to achieve their maximum potential. There is an emphasis on inter-relationships and intra-relationships as well as consideration of lifestyle and cultural diversity within individuals, families, aggregates, communities and society (IFACS) during childbearing and child-rearing years. Reproductive processes, women's health issues, and pediatric content are explored. The spectrum of nursing roles within the context of a variety of health care settings along with the process of decision making in health care is also explored.

4107. Theories and Concepts: Community Health Nursing 7(4-9)

Prerequisites: NURS 3705 (RN/BSN); NURS 4007 and 4017 (BSN Generic).

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. Emphasis on planning and providing nursing care for individuals, families, aggregates, communities, and societies (IFACS) is related to community assessment, health promotion/patient education, and primary-secondary-tertiary prevention.

4307. Theories and Concepts: Nursing Management 7(4-9)

Prerequisites: NURS 3705 (RN/BSN); NURS 4007 and 4017 (BSN Generic).

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.

4403. Special Topics 3(1-3)

Prerequisite: Senior standing or consent of Chair of undergraduate nursing program.

Theoretical and/or clinical application of selected nurses issues.

4503. Selected Nursing Issues 3(3-0)

Prerequisite: Consent of instructor or Chair of undergraduate nursing program.

Selected nursing issues. To be conducted on an independent basis with the student and selected nursing faculty member. Issues may vary.

4602. Theories and Concepts: Professional Nursing 2(2-0)

Prerequisite: NURS 3407 or consent of Chair of undergraduate nursing program.

Examination of current health care trends and issues is conducted in regard to ethical, legal, and economic aspects through values clarification and self examination. The student is encouraged to develop an individual concept of nursing professionalism, responsibility and accountability. Discussion of historical influences and the multi-faceted role of the nurse is included.

RADIOLOGIC SCIENCES

Nadia Bugg, Chair (J. S. Bridwell Hall 201F)

Professors: Bugg, Whaley

Associate Professors: Morrison, Porter

Assistant Professors: Killion, Pearson, Phifer,

BACHELOR OF SCIENCE IN RADIOLOGIC SCIENCE DEGREE (130 semester hours)

1. The Radiologic Science Entry Level Certificate Program is designed to prepare students for a career as a radiographer. Students must file an application for fall admission with the program by May 1. The radiography courses must be taken in the sequence prescribed. A student must earn a C (2.0) or above in all RADS courses, BIOL 1134, 1234, and math. Proof of professional liability insurance and program/state mandatory immunizations are required prior to enrollment in any radiologic science clinical course. Proof of health/accidental insurance is required prior to enrollment in RADS 1413. This portion of the B.S.R.S. degree is accredited by the Joint Review Committee on Education in Radiologic Technology so students will be eligible to sit for the ARRT radiography exam upon completion of the specified certificate courses.
2. The Bachelor of Science in Radiologic Science Degree is designed to meet the unique needs of the working registered technologist through distance education delivery methods. The courses are designed to increase the comprehensive quality and depth of the technologists' education. The program offers a variety of subjects from teaching and management strategies to physics and procedures. The degree provides a pathway for upward mobility in the profession.

Admission Criteria for RADS Majors to the Entry Level Certificate Program:

1. Be eligible for admission to Midwestern State University.
2. Submit a program application and recent transcripts to the program office.
3. Complete an observation at a hospital affiliate.
4. Have a GPA of 2.0 or greater on all college-level work and be in good academic standing.
5. Complete the following courses with at least a 2.5 GPA:
 - ENGL 1113, 1123
 - BIOL 1134, 1234
 - College level Math - 3 hours
 - PSYC 1103 or SOCL 1133
 - RADS 1012, 1132

Admissions Procedure to Certificate Program:

Due to the limited availability of clinical site assignments, the selection process for admission will be based upon, but not limited to:

- Previous college credit
- GPA
- Previous health care related experience
- Selection of clinical site location
- Health-related certification/license
- Courses completed in English, math, biology, physics, chemistry, computer science, and nursing.

Requirements for completion of the certificate portion of the program for eligibility to sit for the ARRT Radiography Exam include:

Major (52 hours)

RADS 1012, 1132, 1223, 1413, 1423, 1513, 2112, 2114, 2121, 2122, 2123, 2216, 2222, 2316, 2331, 3023, 3773, and 4643.

General Academics in addition to those required for admission (29 hours)

Fine Arts or Humanities 3 hours

Speech Communications 3 hours

CMPS 1023 or EDUC 1023 or BCIS 2153

Admission Criteria for ARRT Technologists to the BSRS Program:

The following requirements must be met by ARRT technologist candidates to be considered for admission. The student must:

1. pass TASP, if required;
2. have an overall GPA of at least 2.0;
3. meet all University admission requirements;
4. be in good standing with the ARRT;
5. attend a program orientation; and
6. be immunized as required by the Texas Department of Health.

The student's adviser must verify that the student meets the above criteria before admission to the program is considered by the admission committee.

ARRT technologists or student technologists may enroll in up to five BS RADS courses before admission to the program is required.

MRT certified technologists may enroll in up to four BS RADS courses.

ARRT technologists may receive advanced placement credit for RADS 1012, 1132, 1223, 1413, 1423, 1513, 2112, 2114, 2121, 2122, 2123, 2216, 2222, 2316, 2331, upon satisfactory completion of examinations relevant to the content of these courses or by articulation. As determined by the chair, students may complete other radiology courses by challenge examination. Advanced standing credit for technologists certified in advanced registries is awarded as follows:

ARRT (T) - RADS 3313

ARRT(N) or NMTCB - RADS 3803

ARRT(M) - RADS 4753

ARRT(QM) - RADS 4623

ARRT(CV) - RADS 3413

ARRT(CT) - RADS 4723

ARRT(MR) - RADS 4743

ARDMS - RADS 4713

Requirements for Completion of the B.S.R.S. Degree Include:

Academic Foundations and Core Curriculum:

Basic Core (27 semester hours):

POLS 1333, 1433 (3 hours must be from a Texas institution)

ENGL 1113, 1123

Any college level non-remedial Math - 3 semester hours

Speech Communication - 3 hours

HIST 1133, 1233

General Degree Requirement:

Demonstrate computer literacy by taking a proficiency test or earning credit for CMPS 1023 or BCIS 2153.

Additional 18 hours:

Select from at least four of the following areas: social sciences, natural sciences, fine arts, speech communications, humanities, economics, and kinesiology. Three hours must be from the fine arts or humanities areas.

Area of Secondary Emphasis and Electives (12 semester hours):

To be determined with approval of the adviser. Three semester hours must be a statistics course.

Major (73 semester hours)

RADS 1012, 1132, 1223, 1413, 1423, 1513, 2112, 2114, 2121, 2122, 2123, 2216, 2222, 2316, 2331, 3023, 3503, 3773, 4643, 4913; plus at least 15 semester hours from the following: 3113, 3203, 3213, 3313, 3323, 3333, 3343, 3413, 3803, 3813, 3823, 4433, 4513, 4523, 4623, 4633, 4713, 4723, 4733, 4743, 4753, 4763, 4773, 4783, 4813, 4823, 4833, 4903, 4923.

All 3000-4000 level courses are available by distance education.

- A minimum of 30 hours must be advanced level.
- Must be in good standing with ARRT.
- Fulfill all general requirements as listed on page .

Advanced certificates will be awarded for completion of RADS courses in defined tracks. All tracks except the Nuclear Medicine and Therapy are designed to assist students in pursuit of the related specified advanced modality registry. The tracks are specified as follows:

Cardiovascular

-RADS 3203, 3213, 3413, 4433, 1 RADS elective

Computed Tomography

-RADS 4723, 4733, 4783, 4433, and 3203 or 3213

Magnetic Resonance Imaging

-RADS 4743, 4773, 4733, 4433, 3203

Mammography

-RADS 4753, 4763, 4633, 4433, 1 RADS elective

Nuclear Medicine-Designed for ARRT (N) or NMTCB Technologists

-RADS 3803, 3813, 3823, 3203, 1 RADS elective

Quality Management

-RADS 4623, 4633, 4763, 4433, 4513

Radiology Administration

-RADS 4513, 4633, 4623, 4433, 4523

Radiography Education

-RADS 4813, 4833, 4823, 4513, 1 RADS elective

Radiation Therapy Designed for ARRT (T) Technologists

-RADS 3113, 3313, 3323, 3333, 3343

COURSES IN RADIOLOGIC SCIENCES (RADS)

An introduction to professional career options in the health sciences. Provides opportunities for exploration of a variety of health disciplines to aid students in making career decisions. Begins development of the professional language of the health sciences as a foundation for understanding relevant literature.

1012. Introduction to Radiography 2(2-0)

This course will provide the student with an overview of radiography and its role in the delivery of health care. Topics to be covered include: program orientation, health care delivery system, hospital and radiology department organization, professional organizations and development, accreditation and credentialing, basic radiation protection, medical ethics and law, medical terminology and communications, methods of patient care, and computer applications in the radiology department. Open to any MSU student.

1132. Radiation Concepts 2(2-0)

Prerequisite: MATH 1003.

Basic principles of radiation concepts are introduced to include: atomic structure, electricity, magnetism, x-ray production, radiographic circuits, and equipment. Open to any MSU student.

1223. Patient Care in Radiology (formerly 1222) 3(2-2)

Prerequisite: Admission to program.

This course will provide the student with an overview of patient care practice in a radiology department as well as the student's role in the delivery of health care. The focus of the course is the acquisition of basic skills and knowledge so that the student can meet and exceed the human needs of the patient. Particular attention will be given to patient assessment, infection control, and safety needs of the patient and radiography professional while in the radiology department.

1413. Radiographic Positioning I 3(2-4)

Prerequisite: Admission to program.

A study of the positioning procedures that demonstrate the osteology and articulations of the upper and lower extremities. Included is an introduction to positioning procedures for the chest and abdominal cavities. Discussion and demonstration explain all procedures necessary to produce radiographs of the related osteology and anatomy. Students practice positioning procedures with other students and produce radiographs of body phantoms.

1423. Radiographic Positioning II 3(2-4)

Prerequisite: RADS 1413.

A study of the radiographic procedures that demonstrate the vertebral column, the bony thorax, the skull, and contrast study positioning procedures of the urinary and digestive systems. Discussion and demonstration explain all procedures necessary to produce radiographs of the related osteology and anatomy. Students practice positioning procedures with other students and produce radiographs of body phantoms.

1513. Imaging Equipment and Film Processing 3(2-2)

Prerequisite: Admission to program.

The equipment component of this course presents the equipment routinely utilized to produce diagnostic images. This includes: radiographic equipment, image intensified fluoroscopy, recording media and techniques, and other imaging equipment. The processing component presents the necessary information for processing radiographic film. Topics covered include: processing area considerations, handling and storage of film, film characteristics, film holders and intensifying screens, automatic processing and silver recovery, and film artifacts.

2112. Radiation Protection (formerly 2113) 2(2-0)

Prerequisite: Admission to program.

This course will provide the student with principles of radiation safety as applied to themselves, the patient, co-workers, and the general public. General principles of the interactions of radiation with living systems, radiation effects on biological molecules and organisms, and factors affecting biological response will be presented. Emphasis will be placed on units of exposure, maximum permitted dose for radiation workers and the public; safe

practice strategies and regulations; and federal guidelines, rules and regulations.

2114. Clinical Education (formerly 2116) 4 semester hours
Prerequisite: RADS 1423.

An introduction to the clinical environment at an affiliated site. Students are rotated through the different work areas to observe and participate in the operation of the Imaging Department. Standard radiographs are performed under supervision of a radiologic technologist. Lectures include radiologic pathology, film critique, and quality assurance. Thirty hours of clinical required each week of the Summer I and II sessions.

2122. Radiographic Pathology 2(2-0)
This course will present pathology, disease, diagnosis, and treatment with an emphasis in radiographic pathology.

2123. Principles of Radiographic Exposure 3(2-2)
Prerequisite: RADS 1513.

An in depth study of the consideration in the production of a radiographic image (in film). Major topics include density, contrast, recorded detail, distortion, latitude, beam limiting, filtration, scattered/secondary radiation, remnant beam, technique, and exposure calculations. Laboratory sessions will further investigate these topics.

2216. Clinical Education 6 semester hours
Prerequisite: RADS 2114.

Students will progress into performance of fluoroscopy, special procedures, trauma, and pediatric procedures with supervision. Other modalities such as ultrasound, magnetic resonance imaging, nuclear medicine, and therapy will be introduced. Thirty hours of clinical required each week.

2223. Special Radiographic Procedures 3(3-0)
Prerequisite: RADS 2112.

A survey of radiographic procedures that involve contrast media covering the following systems: circulatory, digestive, nervous, and urinary. Other topics include pediatric and trauma radiography, digital subtraction, and tomography.

2316. Clinical Education 6 semester hours
Prerequisite: RADS 2216.

Students will progress into performance of standard radiographic procedures with limited supervision. Thirty hours of clinical required each week.

2331. Seminar in Radiography 1(1-0)
Prerequisite: RADS 2216.

The following topics will be discussed: state and national certification, present and future job trends, job requisition skills, and future technology.

2403, 2413, 2423. Special Problems 3(3-0)
Prerequisite: Consent of Program Chair.

Directed studies in selected topics with emphasis on interests and needs of students. May be repeated once for credit.

3023. Physics of Diagnostic Radiology I 3(3-0)
Prerequisite: College level math.

A study of advanced physical principles of diagnostic radiology. Topics include energy, atomic theory, electricity, transformers and x-ray circuit, rectification, and x-ray tubes.

- 3113. The Physics of Diagnostic Radiology II** 3(3-0)
Prerequisite: RADS 3023 or consent of instructor.
The study of advanced physical principles of diagnostic radiology. Topics include radiation, x-ray tubes, the x-ray beam, x-ray generation, interaction, attenuation, filtration, beam restriction, and controlling scatter.
- 3203. Pathology for Diagnostic Imaging** 3(3-0)
This course will present pathology, disease, diagnosis, and treatment in the imaging modalities.
- 3213. Patient Care in Advanced Imaging** 3(3-0)
This course focuses on the unique needs of the patient in the advanced imaging areas. Topics include a review of basic patient care, charting, history and physical, identifying and treating adverse reactions, and monitoring the patient during the procedure.
- 3313. Radiation Therapy** 3(3-0)
This course provides an overview of radiation therapy by examining how cancer is treated with radiation. Discussions of radiobiology, treatment modalities, basic radiotherapy physics, and malignant disease processes are provided.
- 3323 Technical Advances in Radiation Therapy** 3(3-0)
Prerequisites: RADS 3023, 3113, 3313, and 3773.
This course focuses on a review of the current treatment methods used in radiation therapy. This will include an update of forms of imaging modalities used in simulation and treatment planning. Simulation will be discussed in detail reviewing conventional simulation, target driven simulation, and virtual simulation. An introduction to treatment planning algorithms will be given. The Task Group 53 Quality Assurance protocol for simulators and linear accelerators will be explained as well as some practical applications. New treatment methods used in radiation therapy will be defined and discussed; these include: 3D conformal radiotherapy, intensity modulated radiotherapy, and stereotactic radiation therapy.
- 3333. Radiation Therapy Physics** 3(3-0)
Prerequisites: RADS 3023, 3113, 3313, and 3773.
The course content is designed to expand radiation therapy concepts and theories. A detailed analysis of the structure of matter, properties of radiation, nuclear transformations, x-ray production, and interactions of ionizing radiation will be given. Units used in external radiation therapy treatment, measurement and quality of ionizing radiation produced, absorbed dose measurement, dose distribution, and scatter analysis will be presented.
- 3343. Radiation Treatment Planning** 3(3-0)
Prerequisites: RADS 3023, 3113, 3313, and 3773.
Content is designed to establish factors that influence and govern clinical planning of patient treatment. Encompassed are isodose descriptions, patient contouring, radiobiologic considerations, dosimetric calculations, compensation, and clinical application of treatment beams. Optimal treatment planning is emphasized along with particle beams, calibration, and related equipment. Stereotactic and emerging technologies are presented. Projects are incorporated to complement specific content areas and are focused on clinical applications.
- 3413. Cardiovascular and Interventional Procedures** 3(3-0)
A survey of cardiovascular and interventional radiologic procedures. Emphasis on the anatomy demonstrated, equipment used as well as 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)
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.

3773. Radiobiology 3(3-0)

This course will provide the radiologic science professional with theories and principles of the interactions of ionizing radiation with living systems. Radiation effects on biologic molecules and organisms and factors affecting biological responses are explored and applied to daily practice. Acute and long term effects of ionizing radiation exposure are discussed and applied to daily practice. The student will explore applications in diagnostic and therapeutic settings.

3803. Introduction to Nuclear Medicine Physics 3(3-0)

This course will provide the student in radiology or nuclear medicine with a practical and relevant overview of the subject, with an emphasis on diagnostic radionuclide techniques within the total context of diagnostic imaging. This course will focus mainly on nuclear medicine procedures and how those procedures relate to the total context of diagnostic imaging.

3813. Nuclear Medicine Imaging 3(3-0)

Prerequisite: RADS 3803.

This course will provide the student in radiology or nuclear medicine with a practical and relevant overview of the subject, with an emphasis on diagnostic radionuclide techniques within the total context of diagnostic imaging. This course will focus mainly on nuclear medicine procedures and how those procedures relate to the total context of diagnostic imaging.

3823. Fundamentals of Nuclear Pharmacy 3(3-0)

Prerequisite: RADS 3803.

This course will provide the student with well delineated descriptions, from basic atomic structure through the clinical uses of radiopharmaceuticals. Features of the course will include: up-to-date descriptions of the latest NRC and FDA regulations, clinical uses of all new radiopharmaceuticals and techniques, including those radiopharmaceuticals having the potential for clinical use, quality control data for all new radiopharmaceuticals, therapeutic uses of radiopharmaceuticals, ^{99m}Tc , chemistry, and radio nuclide generators.

4123. Statistics for the Health Sciences 3(3-0)

The focus of this course is to provide a statistics course specifically for health science 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 study design, central tendency and variability, probability, repeated measures analysis of variance, data association and prediction, and evaluating diagnostic procedures.

4433. Practicum 3 semester hours

Prerequisite: Consent of Program Adviser.

Intensive clinical assignment 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. Includes such topics as methods of billing, modern record and film filing systems, in-service training, and human relations.

4523. PACS in Radiology 3(3-0)

This course will investigate the use of picture archival and communications systems and its impact on healthcare. Topics will 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 will present basic theories and principles related to the consistently safe utilization of diagnostic radiographic equipment in a clinical setting. The theories and principles responsible for the production of quality radiographs with minimal patient exposure and production costs will be a focus of the course. The student will apply the theories and principles of safe radiation exposure by utilizing various strategies including projects and introductory laboratory experiments.

4633. Continuous Quality Improvement in Radiographic Technology 3(3-0)

A study of the principles and methodologies of continuous quality improvement. Comparison with traditional quality assurance will be included as well as implementation standards to satisfy JCAH. Students will perform mind-set, departmental, and system evaluations.

4643. Health Law in Medical Imaging 3(3-0)

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. Includes properties of ultrasound, transducers, modes of application, cross sectional anatomy, and techniques of medical diagnostic ultrasound applications.

4723. Physics 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.

4733. Cross-sectional Anatomy 3(3-0)

A study of human anatomy as viewed in cross-section. A comparison of planar anatomy, as viewed in conventional radiography, and cross-sectional anatomy and how they relate to computed tomography and magnetic resonance imaging.

4743. Magnetic Resonance Imaging 3(3-0)

This course will explore the basic physical and technical principles of MRI scanning. Related clinical applications, system components, image characteristics, quality control methods, limitations, and future developments will be introduced.

4753. Mammography 3(3-0)

The purpose of this course is to provide the technologist with guidelines for performing quality mammography examinations. Includes the historical background of breast cancer and technical evolution of mammographic technique, essentials of the "Imaging Chain," patient education, QA, trouble shooting, instrumentation, and positioning.

4763. MQSA, QC 3(3-0)

This course will introduce the student to the regulations established under the mammography Quality Standards Act of 1992. The regulations were fully implemented in 1999. This course was developed based upon the principles of the Act in response to public concern to assure that mammograms were performed in a safe reliable manner and afford the earliest detection of breast cancer possible. Quality control procedures will be presented based upon the Act.

4773. Magnetic Resonance Imaging Application 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 focus of the course will be on MR sequences and presentation of anatomy and pathology.

4783. **Computed Tomography Applications** 3(3-0)
Prerequisite: RADS 4723.
This course focuses on the use of computed tomography as an imaging tool from the technologist's perspective. Topics include a review of patient care, contrast media and adverse reactions, and imaging protocols for the brain, sella tursica, orbit, temporal bone, paranasal sinuses, neck, chest, abdomen, pelvis, and spine. Also discussed are general considerations and CT-guided interventional techniques.
4813. **Teaching Strategies in Radiologic Sciences** 3(3-0)
This course enhances skills in teaching radiologic technology 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
Teaching under supervision in a program of radiologic sciences.
4833. **Evaluation Methods in Radiologic Sciences** 3(3-0)
Prerequisite: RADS 4813.
This course provides instruction in test and measurement, analysis of test results, and program credentialing process.
4903. **Selected Topics** 3(3-0)
Intensive study and coverage of selected topics in radiologic sciences. May be repeated for credit when topics vary.
4913. **Special Problems** 3 semester hours
Prerequisite: RADS 3503.
Directed research and projects selected according to the interest and needs of the student. May be repeated once for credit.
4923. **Internship** 3 semester hours
Prerequisites: 12 hours of advanced level radiologic science courses or consent of instructor.
Field experience in selected sites.

RESPIRATORY CARE

William C. Burke, Program Chair (J.S. Bridwell Hall 301C)
Annette O. Medford, Clinical Chair (J.S. Bridwell Hall 301B)
Associate Professor: Burke
Assistant Professor: Medford

The respiratory care program offers a curricula leading to a Bachelor of Science in Respiratory Care degree. Following completion of the BSRC program, the graduates are eligible to sit for the Credentialing Examination for both the Certified Respiratory Therapist (CRT) and the Registered Respiratory Therapist (RRT). Upon successful completion of the CRT examination, the graduate may apply for a Texas state license to practice respiratory care as a Respiratory Care Practitioner (RCP).

Certified Respiratory Therapist (CRT) and the Registered Respiratory Therapists (RRT) may be admitted to the program through advanced standing as defined in the policy set up by the program.

The BSRC program is currently accredited by the Committee on Accreditation for Respiratory Care (CoARC),

which entitles the graduate to sit for all of the credentialing examinations. The program consists of 129 total semester hours (68 semester hours in respiratory care and 61 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. There are three types of admission: full, conditional, and denied. Full admission is granted to program admission applicants who have completed all program prerequisites and required academic foundation courses are in good academic standing and are ranked in the top 20 of candidates applying for admission. Conditional admission is granted to program applicants who have not completed but are presently enrolled in course work that will complete the program prerequisites and required academic foundation courses, and are ranked in the top 20 of candidates applying for admission. Once a conditionally admitted student successfully completes the required course work their admission status is automatically upgraded to full admission. If the student who was conditionally admitted does not successfully complete the prerequisites, their conditional status is automatically changed to denied. Ranking is made by GPA on the program prerequisites that a student has completed at the time of program application. The following rules apply to admission to the Respiratory Care Program.

1. Applications are obtained from the Respiratory Care Office, room 301 of Bridwell Hall.
2. Applications are available the beginning of the spring semester and are due in the Respiratory Care Office no later than March 1.
3. Admission only applies to the current academic year. Students who are granted admission and choose not to enroll must re-apply the next academic year.
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 Algebra, Microbiology, Rhetoric and Composition I and II, computer applications, speech communication, psychology or sociology (see the specific course requirements). Any student who is admitted conditionally will automatically have his/her admission status changed to denied if they do not complete the program prerequisites.
5. All students with the full admission status will begin the respiratory care course work in the Summer I term. There are no exceptions to this rule; the curriculum is sequential and must be taken in a specific order.
6. The required academic foundation courses are humanities (6 hours), economics, Political Science I, Political Science II, U.S. History to 1865, U.S. History Since 1865, fine arts and two kinesiology activity courses (see specific descriptions). Twenty-two of these 28 credits must be completed before taking any respiratory care classes. Any student who is admitted conditionally will automatically have his/her admission status changed to denied if the student does not complete at least 22 of the academic foundation credits before beginning the respiratory care courses.
7. All program prerequisites must be completed with a grade of "C" or better. A passing grade is required in all of the academic foundation credits before beginning the respiratory care courses.
8. The students' GPA on the program prerequisites they have completed at the time of application is used to rank all students being considered for admission. The top 20 candidates are admitted so long as they are in good academic standing and have completed the program prerequisites and required academic foundation classes.
9. Notification of admission is made in writing and requires an acceptance form returned to the Respiratory Care Program. By accepting the position the student agrees to the technical standards required to become a respiratory therapist that are stated in the letter awarding either full or conditional admission.
10. These rules are in place, in part, so that the student can complete all BSRC degree requirements 23 months from starting the 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 their national board examination following graduation.

TIME LIMITATIONS

BSRC degree students must complete all respiratory courses within a three (3) year period of time beginning with the initial enrollment into Foundations of Patient Care.

The Respiratory Care Program does offer a Registry-to-Baccalaureate-Degree program to sites distant to the Midwestern State University campus. The time limitations and specific policies for the distance course offerings are site specific and subject to change. Please consult the Program Chair for current information.

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, 3004	CHEM 1103
PSYC 1103 or SOCL 1133	MATH 1233*
ENGL 1113, 1123	CMPS 1023*
SPCH 1133 or 1233	

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 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 courses may repeat the course only once.
3. If the student withdraws from respiratory care courses and/or the University, he/she must go through the respiratory care admission process again.
4. A student on university scholastic 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, 3004	HUMANITIES - 6 credits
CHEM 1103	SPCH 1133 or 1233
PSYC 1103 or SOCL 1133	ECON 1333*
KNES - 3-4 credits	HIST 1133, 1233
MATH 1233*	POLS 1333, 1433
ENGL 1113, 1123	FINE ARTS - 3 credits

* or equivalent

GENERAL DEGREE REQUIREMENTS: Demonstrate computer literacy by taking a proficiency test or earning credit for CMPS 1023, 1043, BCIS 2153, or EDUC 1023.

MAJOR (68 semester hours)

RESP 3403, 3413, 3423, 3433, 3443, 3512, 3523, 3543, 3552, 3553, 3561, 3712, 3722, 4102, 4123, 4223, 4403, 4422, 4423, 4432, 4433, 4443, 4453, 4463, 4711, 4722, 4732.

COURSES IN RESPIRATORY CARE (RESP)

HSAD 1001. Introduction to Health Sciences 1(1-0)

An introduction to professional career options in the health sciences. Provides opportunities for exploration of a variety of health disciplines to aid students in making career decisions. Begins development of the professional language of the health sciences as a foundation for understanding relevant literature.

3403. Foundations of Patient Care 3(3-0)

The focus of this lecture course is to introduce 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)

The focus of this lecture course is on application of 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)

The focus of this lecture course is 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.

The focus of this lecture course is 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.

The focus of this lecture course is 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.

The focus of this lecture course is 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.

The focus of this lecture course is 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.

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. Sixteen hours of clinical required each week.

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. Sixteen hours of clinical required each week.

4102. Clinical Patient Management 2(2-0)

Prerequisite: RESP 4463.

The focus of this lecture course is to train 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. Statistics for the Health Science 3(3-0)

Prerequisite: Senior Respiratory Care student.

The focus of this course is to provide a statistics course specifically for health science 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; study design, central tendency and variability, probability, repeated measures analysis of variance, data association and prediction, and evaluating diagnostic procedures.

4223. Education Theory and Practice 3(3-0)

Prerequisite: Senior Respiratory Care student.

The focus of this lecture course is to train 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.

4403. Pulmonary Diagnostics 3(3-0)

Prerequisites: RESP 3423, 3433.

The focus of this lecture course is the study of 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.

The focus of this lecture course is to educate 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.

The focus of this lecture course is to instruct 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.

The focus of this lecture class is to provide the student with an assessment of their educational strengths and weaknesses with respect to the practice of respiratory care. Topics include an assessment of the following examinations; certification, written registry, clinical simulations, and pulmonary function technology.

4433. Cardiopulmonary Dynamics 3(3-0)

Prerequisites: RESP 3543, 3552.

The focus of this lecture course is to provide 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 arterial, central venous and pulmonary artery pressure monitoring, cardiac output measurement, and balloon counterpulsation.

4443. **Management of Health Care Services** 3(3-0)
Prerequisite: Senior Respiratory Care student.
The focus of this lecture course is to introduce the student to health services. Emphasis is placed on factors driving change in the health care system and management of health care resources. Topics include health services, health care systems, health care providers, financial and personnel resources, for profit and not-for-profit organizations, medical education, managed care, reorganization, and current issues facing the health care system.
4453. **Advanced Health Assessment** 3(3-0)
Prerequisite: Senior Respiratory Care student.
The focus of this lecture course is to provide 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.
4463. **Respiratory Pathophysiology** 3(3-0)
Prerequisites: RESP 3523, 3543.
The focus of this lecture course is to review 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.
4473. **Clinical Hemodynamics** 3(3-0)
Prerequisite: Senior Respiratory Care student or Registered Respiratory Therapist.
The focus of this lecture course is the technical and therapeutic use of hemodynamic monitoring in the critically ill patient. Topics include but are not limited to, arterial pressure, central venous pressure, pulmonary artery pressure, cardiac output, intracranial pressure, and hemodynamic profiles. Case studies are used to emphasize critical thinking and clinical significance.
4483. **Electrocardiography** 3(3-0)
Prerequisite: Senior Respiratory Care student or Registered Respiratory Therapist.
The focus of this lecture course is the interpretation of the electrocardiogram. Topics include, but are not limited to, basic principles, waves and leads, axis and axis deviations, atrial and ventricular enlargement, rhythm disturbances, and myocardial ischemia and infarction.
4652. **Independent Study** 2 semester hours
Prerequisite: Consent of Chair.
The purpose of this course is to allow 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.
4653. **Independent Study** 3 semester hours
Prerequisite: Consent of Chair.
The purpose of this course is to allow 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.
4663. **Advanced Practice Problems** 3 semester hours
Designed for advanced students to work in appropriate areas not otherwise available. May be taken twice 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. The focus of this clinical course is 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. Eight hours of clinical required each week.

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. The focus of this clinical course is 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. Sixteen hours of clinical required each week.

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. The focus of this clinical course is 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. Sixteen hours of clinical required each week.

4803. Internship in Respiratory Care

3 semester hours

Prerequisites: Clinical I, II, and III 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.

COLLEGE OF LIBERAL ARTS

Michael L. Collins, Dean

The College of Liberal Arts offers majors, minors, programs, and courses in Applied Arts and Sciences, Aviation Management, Biblical History and Literature, Criminal Justice, English, Foreign Languages, History, Humanities, International Studies, Philosophy, Political Science, Psychology, Social Work, and Sociology.

BACHELOR OF APPLIED ARTS AND SCIENCES

J. David Martin, Coordinator (O'Donohoe 231)
(940) 397-4400 / (940)397-4744 /FAX (940)397-4918
martinjd@nexus.mwsu.edu
www.mwsu.edu/htmldocs/departments/polysci/baas.htm

MISSION STATEMENT

The Bachelor of Applied Arts and Sciences (B.A.A.S.) degree is designed to offer students with 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 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 hours of advanced credit that is complementary to the vocational-technical or professional area, and any additional hours necessary to meet the 124-hour university requirement as stated in the catalog.

ADMISSION TO PROGRAM

The student must arrange a personal interview with the coordinator before the student can be admitted to the B.A.A.S. degree program.

B.A.A.S. students are limited to not more than twenty-five percent of their total credit hours in courses transferable to a program in a school of business and not more than fifteen 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 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 adviser in the student's previous major.

DEGREE REQUIREMENTS

The students must complete a baccalaureate degree plan from residence and transfer credit by meeting the requirements for Option A or Option B as follows:

OPTION A: Traditional B.A.A.S. Program

Academic Foundations and Core Curriculum (see page)
Occupational Specialty (23-36 semester hours)

Credits toward an area of coherent specialization may be earned from junior or community colleges, this university and other senior institutions, vocational or technical schools, armed forces schools, work experiences, and non-traditional learning experiences that can be equated to college credit. Credit for work experience is limited to a maximum of 6 semester hours based on a maximum of 2 hours for each year of successful qualifying experience related to the student's occupational specialty. Credit for non-traditional experiences is granted on the basis of evaluation by the Program Coordinator and the B.A.A.S. Advisory Committee utilizing the national guide of the American Council on Education and other appropriate publications. Documentation will be placed in the student's permanent file in the Office of the Registrar and Admissions. A minimum of 24 semester hours in the area of occupational speciality must be completed before the student can be accepted into the program. Cognate vocational-technical courses may be accepted within the area of occupational speciality or professional development.

Professional Development (36 semester hours, 30 of which must be advanced and may include 6 hours of B.A.A.S. Internship)

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.

BAAS Internships:

BAAS 3113. Internship

3(0-3)

Prerequisite: Junior standing.

Students will be assigned jobs that can be demonstrated to be an integral learning portion of their career development in approved employment situations. Students will be supervised by their employer and the Coordinator of the program/discipline under which the internship falls. Applications for internship require the approval of the B.A.A.S. Coordinator. Application for permission to enroll in the internship must be received by the coordinator no later than three weeks prior to registration. Each internship may be repeated once for additional credit up to a maximum of six semester hours of internship for the degree. B.A.A.S. students enrolled in the internship should keep a diary relating to the internship, noting the tasks undertaken and relating how they relate to employment and future career goals. From that diary, students should write an internship report of no less than five double spaced pages relating learning experience to career objectives. The report is due no later than one week before the end of the applicable term.

OPTION B: AVIATION MANAGEMENT

Adviser: Dr. Michael Preda (O'Donohoe 203)

(940) 397-4341

fpredam@nexus.mwsu.edu

Aviation Management is an exciting career field which provides the student the opportunity to pursue responsible positions in the military and in the air transportation industry, including airline operations and management, corporate aviation, airport management, and government operations. This degree program is intended to fulfill the educational needs of persons who have aviation-related work experience and technical training from the military, technical institutes, community colleges, and industry training programs. The goal of this program is to equip students with adequate knowledge and skills in aviation management in order to compete in the rapidly changing and highly competitive field of aviation.

Midwestern's Aviation Management program is a specialization of the Bachelor of Applied Arts and Sciences (B.A.A.S.) degree at Midwestern State University. The following are requirements for the program.

Academic Foundations and Core Curriculum (see page _____)

Occupational Specialty (24-36 semester hours)

A minimum of 24 hours of credit in vocational-technical education is required. These credits may be earned at universities, community colleges, vocational or technical schools, armed forces schools whose work can be equated to vocational/technical schools (i.e., through the A.C.E. Guide), and from work experience. Credit from work experience is limited to a maximum of 6 semester hours. The Airframe & Powerplant F.A.A. Certificate and/or the F.A.A. Private Pilot's License provide good resources for this program.

Professional Development in Aviation Management (36 semester hours, 30 of which must be advanced)

Required Courses: AMGT 3103, 3213, 3223, 3243, 3313, 3323, 4102, 4123, BUAD 3233, ENGL 3203, and 7 hours of approved electives.

Additional electives (6-18 semester hours)

TOTAL **124 semester hours**

COURSES IN AVIATION MANAGEMENT (AMGT)

3103. **Introduction to Aviation Management** 3(3-0)
A basic introduction to the field of aviation management. Includes study in the scope of the aviation field, concepts, theory, and practices relevant to the management of aviation.
3213. **Regulation in the Aviation Industry** 3(3-0)
A study of the regulatory agencies and regulations as they relate to airport operations.
3223. **Legal Environment of Aviation** 3(3-0)
Basic law as it relates to the operation of aviation systems. This includes legal authority, liability, personnel, and contracts.
3243. **Airport Administration, Planning, and Development** 3(3-0)
A study of the operation and management of airports. This includes airway systems, financial planning and management, development, and airport relations.
3313. **General Aviation Administration and Marketing** 3(3-0)
Operation of airports and marketing for fixed base operators, general aviation, and commercial operations.
3323. **Administration of Aviation Maintenance** 3(3-0)
A study of maintenance of airports for fixed-base operator as well as commercial air carrier operations.
4102. **Labor Law and Relations** 2(2-0)
A study of labor relations including the rules governing labor relations, collective bargaining, administration, public policy, and law. This includes federal and state labor law as it relates to the operation of airports.
4123. **Aviation Safety** 3(3-0)
A study of the basics of airport safety as it relates to regulations, accidents, on site safety program development, and personnel.

BIBLICAL HISTORY AND LITERATURE

Instructor: Lee

A maximum of 12 semester hours in religious studies may be counted as elective credit toward the bachelor's degree. Courses in religious studies are taught without regard to sect or creed. These courses are taught off-campus in campus ministry centers adjacent to the University.

COURSES IN BIBLICAL HISTORY AND LITERATURE (BIBL)

1133. **Introduction to the Old Testament** 3(3-0)
A study of the history, literature, and teachings of the Old Testament.
1233. **Introduction to the New Testament** 3(3-0)
A study of the history, literature, and teachings of the New Testament.
1333. **Life and Teachings of Jesus** 3(3-0)
A study of the life, teachings, and significance of Jesus of Nazareth as can be determined from the four Gospels and related historical and archaeological data.

CRIMINAL JUSTICE

Emily E. LaBeff, Chair (O'Donohoe 124)
Professor: Martin
Associate Professors: Dover, Flavin
Instructor: Paddack

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN CRIMINAL JUSTICE DEGREE:

Academic Foundations and Core Curriculum (see page)

Program Requirements

Three hours from Psychology, Sociology, or Social Work
One year in one foreign language (or six additional hours of science)

Major (30 semester hours)

Criminal Justice 1113, 2213 or 2223, 2233 or 2243, 3213, 4213, and 15 additional hours to total at least 15 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)

Criminal Justice 1113, 2213 or 2223, 2233 or 2243, 3213, 4213, and six additional hours to total at least nine advanced hours.

COURSES IN CRIMINAL JUSTICE (CRJU)

1113. **Introduction to Criminal Justice** 3(3-0)
History, development, and philosophy of law enforcement; introduction to the agencies involved in the administration of criminal justice.

2123. **Police-Community Relations** 3(3-0)
Analysis of 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** 3(3-0)
History and philosophy of modern criminal law, including the structure, definition, and application of statutes and leading case law; the elements of crimes and penalties; general provision of the Texas Penal Code.
2223. **Legal Aspects of Corrections** 3(3-0)
Substantive law relating to corrections with special attention on the laws of Texas. Emphasis on application of statutes and cases to basic rights of convicted.
2233. **Police Systems and Practice** 3(3-0)
The study of the police professions; organization of law enforcement systems; the police role; police discretion and ethics; current and future issues.
2243. **Correctional Systems and Practices** 3(3-0)
The study of corrections in the criminal justice system including institutional operations, alternatives to institutionalization, and treatment and rehabilitation.
2913. **Fundamentals of Criminal Investigation** 3(3-0)
Introduction to criminal investigation. Consideration of conduct at the crime scene, including the recognition, collection, and preservation of the various types of evidence. Fundamentals of the interview, interrogations, the use of informants, and surveillance techniques. Particular attention to the identification of the various elements of specific offenses.
3213. **Research Methods** 3(3-0)
For course description, see listing under Political Science.
3443. **Municipal Government and Metropolitan Problems** 3(3-0)
For course description, see listing under Political Science.
3733. **Juvenile Delinquency** 3(3-0)
For course description, see Sociology course listing.
3933. **The Judicial System and Process** 3(3-0)
For course description, see listing under Political Science.
4133. **Public Administration** 3(3-0)
For course description, see listing under Political Science.
4213. **Criminal Law** 3(3-0)
Examination of the purpose and goals of criminal law and a study of the historic development of its basic concepts. Study of the substantive criminal law with emphasis on the Texas Penal Code. Analysis of recent court 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 Procedures** 3(3-0)
A study of the procedural laws of the State of Texas with particular attention to the provisions of the Code of Criminal Procedure. Study and analysis of constitutional and other limitations, court interpretation and recent Federal statutory provisions as they relate to criminal procedure.

4233. **American Constitutional Law I** 3(3-0)
For course description, see listing under Political Science.
4243. **American Constitutional Law II** 3(3-0)
For course description, see listing under Political Science.
4253. **Comparative Criminal Justice Systems** 3(3-0)
A comparative study of criminal justice systems, with particular attention to their development, present structures and their influences on American criminal justice. May be repeated as topics vary.
4773. **Internship in Criminal Justice** 3(3-0)
Field experience in selected criminal justice agencies. May be repeated for credit up to six hours.
4901. **Problems in Criminal Justice** 1(1-0)
Prerequisites: 12 hours of criminal justice or consent of the college dean.
Supervised reading in the field of criminal justice.
4902. **Problems in Criminal Justice** 2(2-0)
Prerequisites: 12 hours of criminal justice or consent of the college dean.
Supervised reading in the field of criminal justice.
4903. **Problems in Criminal Justice** 3(3-0)
Prerequisites: 12 hours of criminal justice and approval of the college dean.
Supervised reading in the field of criminal justice. May be repeated for credit when topics vary.
4913. **Issues in Criminal Justice** 3(3-0)
Prerequisites: 12 hours of criminal justice or consent of the instructor.
Description and analysis of crucial issues relating to selected structures and processes in the criminal justice system; review and analysis of recent studies concerning criminal justice. May be repeated for credit when topics vary.
4923. **Seminar in Criminal Justice** 3(3-0)
Prerequisites: 12 hours in criminal justice or consent of the instructor.
Study and research of specific issues in law enforcement. May be repeated for credit when topics vary.

ENGLISH

Thomas W. Galbraith, Chair (Bea Wood 216)

Professors: J. Hoggard, L. Hoggard, R. Johnson, Smith

Associate Professors: Carpenter, Galbraith, Hoffman, Stewart, Taylor

Assistant Professor: Rogers

Instructors: Barnett, Clancey, Giddings, Henson, S. Johnson, McNeely, White

Professors Emeriti: Brown, Campbell, Whitlock

English Usage Test. Passing the English usage test or passing English 2113 is required of all students seeking bachelor's degrees. The test consists of a 300-500 word essay written on one of several topics, and passage requires competence in each of three areas: (1) organization and development, (2) clarity, (3) mechanics. (See description of English 2113, page , and General Requirements for All Bachelor's Degrees, page .)

REQUIREMENTS FOR A MAJOR IN ENGLISH

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

Academic Foundations and Core Curriculum (see page)

Program

Additional General

At least a C average in lower-level English work

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 (excluding 3013); nine hours chosen from 4000 level courses; and nine hours English electives (excluding 2113 and 3013)

Minor is to be selected from an area of interest approved by the chair of the program involved.

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 (excluding 3013); three hours chosen from 4000 level courses; and three hours English elective (excluding 2113 and 3013).

REQUIREMENTS FOR A MINOR IN ENGLISH: WRITING EMPHASIS

Eighteen semester hours, exclusive of 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 requirements for the degree of Bachelor of Arts with a teaching certificate may be found on page .

The following list of undergraduate courses outlines the varying emphases offered by the English Program.

FRESHMAN ENGLISH

1113, 1123

SOPHOMORE LITERATURE

2413, 2423, 2613, 2623, 2813, 2823

Any of these courses can serve as a literature course in the core curriculum. See page .

WRITING COURSES

2113, 3103, 3203, 3523

GENERAL LITERATURE COURSES

3003, 3253, 3273, 3293, 3303, 3313, 3333, 3343, 3503, 3703, 3713, 3723

Any of these courses can substitute as a literature course in the core curriculum.

LANGUAGE AND LINGUISTICS COURSES

3513, 4513, 4523, 4753, 4763

THEORETICAL COURSES

3533, 4533

AMERICAN LITERATURE COURSES

4623, 4633, 4643, 4653

ENGLISH LITERATURE COURSES

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 TASP test, 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 TASP test, 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 3(3-0)

Prerequisites: Except as noted below,* a student must have met, or be exempt from on the basis of other examination scores, the reading and writing standards of the Texas Academic Skills Program (TASP), or the student must have passed the reading and writing sections of the MSU Placement Test.

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.

1123. Rhetoric and Composition 3(3-0)

Prerequisite: English 1113. Except as noted below,* no student who has on file a current failing score for the

writing section of TASP may enroll in this course.

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.

* State law allows a student who has taken and passed a developmental course and nonetheless fails the related section of the TASP test for a second time to enroll in a collegiate level course in the relevant skill area. If the student earns a B or better, he or she is not required to retake the failed section of TASP or to complete additional developmental work. Thus a student who has completed English 1003 but fails the writing section of the TASP test for a second time may enroll in English 1113. If, however, that student does not earn a B or better in 1113, he or she must re-enroll in English 1003 and may not take English 1123 until he or she has passed the writing section of TASP.

The English Program strongly urges students who fail TASP a second time to re-enroll immediately in the related developmental course rather than to risk failure in a collegiate level course for which they are most likely not yet prepared.

2113. Composition Skills 3(3-0)

Prerequisite: English 1123.

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 English usage examination. 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 3(3-0)

Prerequisite: English 1123.

A study of the masterpieces of Western world literature from Homer through the Renaissance.

2423. World Literature 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 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 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.

2813. Survey of English Literature 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 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.
3013. **Children's Literature** 3(3-0)
Prerequisites: Six hours of sophomore English.
Survey of children's literature familiarizing students with all literary genres and focusing on the work of the most important writers and illustrators in the field. May not be counted toward an English major or minor or toward English as a first or second teaching field or teaching emphasis.
3103. **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.
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. 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.
- 3533. The Theory of Composition** 3(3-0)
Prerequisites: Six hours of English beyond 1123 or consent of chair.
The theory and practice of composition, including process, rhetorical, and thematic models and their relation to individual and group writing.
- 3703. Themes in American Literature and Life** 3(3-0)
Prerequisite: English 1123.
Thematic studies of the American literary, social, and cultural scene from the Puritans to the present.
- 3713. Contemporary American Literature and Life** 3(3-0)
Prerequisite: English 1123.
Contemporary American culture as reflected in American literature, social backgrounds, and the arts.
- 3723. Selected Studies in Literature** 3(3-0)
Prerequisite: English 1123.
Concentrated study of selected authors, genres, or themes. 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.

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

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. **Selected Studies 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. **Russian Literature** 3(3-0)
Prerequisites: Six hours of English beyond 1123 or consent of chair.
A study of such major writers as Pushkin, Gogol, Dostoyevsky, Tolstoy, and Chekhov.
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. **Directed Reading or Research** 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.

MCMURTRY DISTINGUISHED PROFESSOR OF ENGLISH

The McMurtry Distinguished Professorship of English was established in 1997 by the William S. Thomas family in honor of Pulitzer Prize-winning author and Archer City native Larry McMurtry, whose award-winning works include *Lonesome Dove*, *The Last Picture Show*, and *Terms of Endearment*.

The professor holding this position is recognized in the literary arts for his regional and national achievements. James M. Hoggard came to Midwestern in 1966. The author of ten 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, the Texas Institute of Letters Short Story Award, and citations of distinction in *The Best American Short Stories* and *The Yearbook of American Poetry*. 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 *Riding The Wind & Other Tales*, *Elevator Man*, *Trotter Ross*, *Breaking An Indelicate Statue*, *The Shaper Poems*, *Two Gulls One Hawk*, *EyeSigns*, and three collections of translations: *The Art of Dying*, *Love Breaks*, and *Chronicle of My Worst Years*.

INTENSIVE ENGLISH LANGUAGE INSTITUTE

William L. White, Director

Instructors: Clancey, Johnson, McNeely, White

The Intensive English Language Institute (IELI) offers an intensive course 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 Advanced Beginner, Intermediate, and Advanced levels. Each level's curriculum includes classes in grammar, oral skills, composition, and reading. The IELI's courses are available to full-time, non-native speakers of English (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 English Program. (IELI courses available through University enrollment include ENGL 1003, ENGL 1013 (F1, F2 sections), ENGL 1023, and ENGL 1033.)

The purpose of the IELI curriculum is to provide quality instruction in English, academic skills, and American culture to individuals from a wide range of backgrounds and language experience. 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.

FOREIGN LANGUAGE

Adalberto Garcia, Chair (Bea Wood 116)

Professor: Hoggard

Associate Professor: Hollabaugh

Assistant Professors: A. Garcia, Fuertes-Manjon, McClintock

Instructors: Donovan, Ebner

Professors Emeriti: G. Garcia, Klein, Volk

Basic courses are offered in French, German, and Spanish. Spanish offers a major and a minor program. French offers 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.

Advanced Placement Program: 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 concerning proficiency exams and contact the chair for more information.

COURSES IN FRENCH (FREN)

The requirements for a minor in French are 12 semester hours beyond 2233.

1134. **Elementary French**

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 a week is required.

1234. **Elementary French** 4(4-0)
 Prerequisite: French 1134.
 Continuation of French 1134. One hour of laboratory practice a week is required.
2133. **Intermediate French** 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** 3(3-0)
 Prerequisite: French 2133.
 Continuation of French 2133.
3133. **Survey of French Literature** 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** 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. **Topics in French Literature** 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.
4533. **Selected Problems in French Literature** 3 semester hours
 Prerequisite: French 3133 or 3233.
 For advanced students with consent of instructor. Special topics assigned for research and investigation.

COURSES IN GERMAN (GERM)

1134. **Elementary German** 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 a week of laboratory practice is required.
1234. **Elementary German** 4(4-0)
 Prerequisite: German 1134.
 Continuation of German 1134. One hour a week of laboratory practice is required.
2133. **Intermediate German** 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** 3(3-0)
Prerequisite: German 2133.
Continuation of German 2133.

SPANISH

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

Academic Foundations and Core Curriculum (see page)

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; and 6 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 .

COURSES IN SPANISH (SPAN)

1134. **Elementary Spanish I** 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 a week is required.

1234. **Elementary Spanish II** 4(4-0)

Prerequisite: Spanish 1134.

Continuation of Spanish 1134. One hour of laboratory practice a week is required.

2133. **Intermediate Spanish I** 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** 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.
- 3343. Spanish for Professionals** 3(3-0)
Prerequisite: Spanish 2233.
Concentrated study of Spanish in such professional disciplines as business, health, criminal justice, or law. Includes intensive vocabulary building and development of communicative skills designed to meet professional demands. May be repeated for credit when topics vary.
- 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. Topics In Hispanic Literature** 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. Selected Problems in Spanish Language, Literature, or Culture 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 adviser. May be repeated once.

HISTORY

Kenneth E. Hendrickson, Jr., Chair (Martin 107)

Professors: Collins, Hendrickson, Hewitt

Associate Professors: Kindig, King, Lindemann

Professor Emeritus: Neighbours

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

Academic Foundations and Core Curriculum (see page)

Program

Major (30 semester hours)

History 1133, 1233, 1333, 1433, and 18 additional semester hours

Minor to be selected in a field acceptable to the chairs of the major and minor program

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.

SURVEY COURSES IN HISTORY (HIST)

FOR UNDERGRADUATES

1133. Survey of American History to 1865 3(3-0)

General survey of American History from its European origins to 1865. Required of all students.

1233. Survey of American History Since 1865 3(3-0)

General survey of American History from 1865 to the present. Required of all students.

1333. Survey of Western Civilization 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 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 (formerly 3013 and 3023) 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. History of England (formerly 3133) 3(3-0)

Prerequisites: Six 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 Glorious Revolution of 1688. The course focuses on the constitutional development of England and discusses the contributions of the Anglo-Saxons and Normans as well as those of the Reformation and Elizabethan eras.

3123. History of England (formerly 3143) 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

A survey of modern England and the emergence of the United Kingdom and the development of the British empire. The course focuses on the developments of British democracy as well as the issues and events of the American Revolution, the Industrial Revolution, the Irish Question, and the impact of the wars of the twentieth century on Britain.

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.

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.

3803. Survey of Eastern Asia 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

This course examines the panorama of social, economic, and political developments in East Asia to the nineteenth century with emphasis upon China, Japan, and Korea.

3813. Survey of Eastern Asia 3(3-0)

Prerequisites: Six hours of history or consent of the chair.

Comparisons, contrasts, stability, chaos, continuity, change, and cultural developments in the nineteenth and twentieth centuries Far East; the clash of the ancient and the modern worlds is the story of China, Japan, and Korea during the last two centuries.

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 which resulted. Institutions such as caudillismo, the church, the military, and their impact are discussed as they developed during the 19th century.

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 which 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 (formerly 4023) 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** (formerly 4033) 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 which 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.
4273. **The Age of Enlightenment** 3(3-0)
Prerequisites: Six hours of history or consent of the chair.
A study of European culture during the age of Louis XIV and the Ancien Regime. The course will focus on the Scientific Revolution and its influence on European thought culminating with the Enlightenment.

4423. **Nineteenth Century Europe, 1789-1914** (formerly 4333) 3(3-0)
Prerequisites: Six hours of history or consent of the chair.
Europe from the French Revolution to World War I. Emphasis upon the results of the French Revolution and the influence of Napoleon, the struggle for democratic principles, industrialization, the unification of Italy and Germany, the expansion of colonial empires, and the underlying causes of World War I.
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.
4603. **The American Frontier, 1607-1838** 3(3-0)
Prerequisites: Six hours of history or consent of the chair.
This course surveys the advancing Anglo-American frontier from the founding of Jamestown through the Indian Removal period and the Cherokee Trail of Tears. The course surveys westward expansion from the Atlantic to the Mississippi River with particular emphasis upon the ongoing clash between Anglo and Native American cultures.
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.

4953. Problems in History

3 semester hours

Prerequisites: Six hours of history or consent of the chair.

This is an undergraduate readings course available on a limited basis to advanced students. Topics will be selected by the student and his adviser.

**HARDIN FOUNDATION DISTINGUISHED PROFESSOR
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 American History Professorship.

Dr. Kenneth E. Hendrickson, Jr., a regionally and nationally known historian, has been designated as the Hardin Foundation Distinguished Professor of American History. Dr. Hendrickson's primary research areas are in the New Deal, American radicalism, natural resources and conservation history, and Texas.

Among his five books are *The Waters of the Brazos: A History of the Brazos River Authority, 1929-1979*, *Hard Times in Oklahoma: The Depression Years*, and *The Chief Executives of Texas: From Stephen F. Austin to John C. Connally, Jr.* He has also contributed to five additional books, written more than two dozen articles and essays, and more than fifty reviews. Currently he is working on an extensive bibliography of Franklin D. Roosevelt.

HUMANITIES

Adviser: Jefferson H. Campbell (Bea Wood 201)

Associate Professor: King

Professor Emeritus: Campbell

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. Academic Foundations and Core Curriculum (see page) (48 semester hours)

II. Humanities Interdisciplinary Major (36 semester hours)

Humanities: 6 hours chosen from 2013, 2023, 2033, 2043

6 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 general requirement for a minor.

Art (21 semester hours)

ART 1113, 1313, 3433, 3443, 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.

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 12 advanced hours from Music History and Literature and Music Theory. May include 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: 6 hours chosen from 2013, 2023, 2033, 2043; 6 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, and African medieval cultures.

2033. **Humanities: Renaissance through Romanticism** 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, and Romanticism (fifteenth through mid-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** 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.
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 had 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, and African medieval 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 had Humanities 2023.
4033. **Humanities: Renaissance through Romanticism** 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 had 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 had Humanities 2043.
4063. **Problems 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

Adviser: Dr. Michael A. Preda (O'Donohoe 203)

Professors: Fukasawa, Hendrickson, Jr., Hewitt, LaBeff, Martin, Martinez, Preda, Watkins, Welch
Associate Professors: Dover, King, Lindemann, A. Taylor, Watson

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 insuring that the student is empowered with the expanse of knowledge which crosses disciplinary, cultural, economic, and geographic borders.

Academic Foundations and Core Curriculum (see page)

Bachelor of Arts (see page)

REQUIREMENTS FOR A MAJOR IN INTERNATIONAL STUDIES:

Required Courses: 15 hour core for interdisciplinary major

HIST 1333	Western Civilization	3 hours
HIST 1433	Western Civilization	3 hours
GEOG 3003	Geography of the World	3 hours
HIST 3133	Comparative World Religions and Cultures	3 hours
SOCL 3783	Population and World Cultures	3 hours

Political Science, 6 hours chosen from the following:

6 hours

POLS 3533	Government and Politics of Western Europe
POLS 3543	Government and Politics of Eastern Europe
POLS 3553	Government and Politics of Central Eurasia
POLS 3563	Government and Politics of the Middle East
POLS 3573	African Politics
POLS 3653	International Relations
POLS 4333	International Law
POLS 4653	International Political Economy
POLS 4853	Contemporary American Foreign Policy
POLS 4933	Issues in World Politics

Economics, 6 hours chosen from the following:

6 hours

ECON 3713	History of Economic Thought
ECON 4633	Contemporary Economic Issues
ECON 4643	International Economics and Finance (also FINC 4643)
ECON 4723	Comparative Economics System

History, 6 hours chosen from the following:

6 hours

HIST 3123	History of England
HIST 3513	Modern Russian State and Empire
HIST 3813	Survey of Eastern Asia
HIST 4173	History of Mexico
HIST 4183	Latin America, Nationalism in the Twentieth Century
HIST 4433	Twentieth Century Europe
HIST 4523	Eastern Europe
HIST 4543	History of the Middle East

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.

REQUIREMENTS FOR A MINOR IN INTERNATIONAL STUDIES:

OPTION I: (23 semester hours)

GEOG 3003, six hours chosen from Category 1, six hours chosen from Category 2.

1. Six hours from the following:

ACCT 4023, BUAD 4763, ECON 4643/FINC 4643, MKTG 4643

2. Six hours from the following:

POLS 3533, 3653, 4333, 4653, 4853, 4933

HIST 3813, 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: FREN 1134, 1234, GERM 1134, 1234, or SPAN 1134, 1234.

OPTION II: (18 semester hours)

GEOG 3003, and six hours from Category 1, six hours from Category 2, plus three hours chosen from the student's area of specialization as approved by the international studies adviser.

1. ECON 4633, 4643, 4653, 4723, BUAD 4763

FINC 4643, MKTG 4643, POLS 3533, 3553, 3653, 4253, 4333, 4663, 4853, 4933, AND MCOM 4663

2. HIST 3813, 4183, 4433, 4523, 4543, 4643

ENGL 2413, 2423, 3003, 4903, 4913, 4943

FREN 3333, GERM 3423, 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

Adviser: Dr. Alfred D. Stewart (Bea Wood 221)

Associate Professor: Stewart

REQUIREMENTS FOR A MINOR IN PHILOSOPHY (18 semester hours)

Philosophy 1033, 2033, 2233, and nine additional semester hours of which six must be advanced.

COURSES IN PHILOSOPHY (PHIL)

1033. **The Primary Concerns of Philosophy** 3(3-0)
 Prerequisites: English 1113 and 1123.
 Methods, areas, concepts, and problems related to man's search for meaning in the Cosmos.
1533. **Logic** 3(3-0)
 Prerequisites: English 1113 and 1123.
 The study of principal methods of organizing thought: the use of sign, symbol, concept, and system.
2033. **Ethics** 3(3-0)
 Prerequisites: English 1113 and 1123.
 What is the "good" for man: an inquiry into the philosophy of morality.
2233. **Classical Philosophy** 3(3-0)
 Prerequisites: English 1113 and 1123.
 A study of the pre-Socratics, Plato, and Aristotle. Discussion of the contemporary uses of classical philosophy.
2633. **Contemporary Philosophy** (formerly 3433) 3(3-0)
 Prerequisites: English 1113 and 1123.
 A survey of philosophy of the twentieth century including the methods and history of the various movements.
3233. **Modern Philosophy** (formerly 2433) 3(3-0)
 Prerequisites: English 1113 and 1123.
 A survey of philosophical problems from Descartes through Kant.
3533. **Topics in Philosophy** 3(3-0)
 Prerequisites: English 1113 and 1123.
 Specialized studies in philosophy. May be repeated when topics vary.
4993. **Problems in Philosophy** 3(3-0)
 Prerequisites: English 1113 and 1123.
 Individual directed readings, with approval of philosophy chair and college dean. May not be repeated.

POLITICAL SCIENCE

Samuel E. Watson, III, Chair (O'Donohoe 222)

Professors: Martin, Preda

Associate Professors: Dover, Flavin, Mertens, Watson

Assistant Professors: Buchanan, Glean

Professors Emeriti: Backhaus, Covert, Sabota

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

Academic Foundations and Core Curriculum (see page)

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, 3653, 4333, 4653, 4853, 4933; 3 hours from 3933, 4133, 4173, 4233, 4243, 4953; 3 hours from: 3233, 3443, 3843, 4013, 4163, 4443; and 6 additional advanced hours. POLS 4903, 4923, and 4973

can be used to fulfill cluster requirements based on their subject matter in a given semester.

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 nine must be advanced.

COURSES IN POLITICAL SCIENCE (POLS)

1333. **American Government** (formerly 2333) 3(3-0)
This course, together with Political Science 1433, fulfills the legislative requirement of six semester hours of American government. A study of the American national and state governmental system. Special attention given to Texas. The American experiment in federalism and democracy; origin and development of the United States Constitution; federal state relations; civil liberties; the individual as a citizen; political parties.
1433. **American Government** (formerly 2433) 3(3-0)
Legislative, executive, and judicial functions in the United States and Texas governments; foreign policy; the conduct of foreign relations; national defense; government and the economy; governmental services.
2523. **Foundations of Government and Politics** 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.
- 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.
- 4013. Legislation** 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 utilizing 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.

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.

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. Problems in Government and Politics 1(1-0)

Prerequisites: Six hours of political science and consent of the program chair.

Supervised reading and research in the field of government and politics.

4902. Problems in Government and Politics 2(2-0)

Prerequisites: Six hours of political science and consent of the program chair.

Supervised reading and research in the field of government and politics.

4903. Problems in Government and Politics 3(3-0)

Prerequisites: Six hours of political science and consent of the program chair. May be repeated for credit when the topics vary.

Supervised reading and research in the field of government and politics.

4923. Seminar 3(3-0)

Prerequisites: Six hours of political science and consent of the instructor.

Study and research of problems in government and political science. May be repeated for credit when topics vary.

4933. Issues in World Politics

3(3-0)

Prerequisites: Six hours of political science.

Analyses of contemporary problems in international politics.

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 program chair.

Field experience in selected government agencies.

PSYCHOLOGY

George M. Diekhoff, Chair (O'Donohoe 122)

Professor: Diekhoff

Associate Professors: Cuevas, Guthrie

Assistant Professors: Coddington, Vandehey

Academic Foundations and Core Curriculum (see page)

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 .

Program requirements remain the same for either degree and are as follows:

Major (33 semester hours)

PSYC 1103, 2203, 3023 or 3913, 3313, 3603 or 4203, 3703 or 4003, 4503, and 4703; and 9 advanced hours, selected with the approval of the student's adviser.

BIOL 2034 (satisfies part of Natural Science requirement in Academic Foundations and Core Curriculum) is an additional program requirement.

All psychology majors must take a written comprehensive examination during their senior year. Contact the Psychology Program office to make 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 adviser and psychology faculty.

GRADUATE PROGRAM

The requirements for a degree of Master of Arts with a major in the field of psychology may be found in a separate graduate catalog.

COURSES IN PSYCHOLOGY (PSYC)

- 1103. General Psychology** 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.
- 3313. Psychological Statistics** 3(3-0)
Prerequisites: PSYC 1103, MATH 1003.
Introduction to descriptive and inferential statistics. Topics include data distributions, descriptive statistics, sampling distributions, interval estimation, one- and two-sample significant difference tests, one-way analysis of variance, correlation, and regression.
- 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.

3873. Psychology of Gender 3(3-0)

Prerequisites: PSYC 1103, 2203.

The course focuses on the history, social customs, and biology of the development and expression of gender behaviors and attitudes within contemporary society.

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, problems related to perception and recognition of incoming stimulation, and the structures and processes of human memory systems.

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.

4401, 4402, 4403. Special Projects 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.

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. Experimental Psychology 3(3-0)

Prerequisites: 12 hours of psychology including PSYC 3313.

The theory and application of scientific methodology in psychological research.

4773. Selected 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.

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 WORK

Jan Walker, Chair (O'Donohoe 202)

Professor: Fashimpar

Assistant Professors: Bisbee, Walker

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. The educational focus for generalist practice utilizes 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 (LSW). Upon completing a 4000 hour counselor internship, BSW graduates are eligible to take the Licensed Chemical Dependency Counselor (LCDC) exam. The 400 hours of internship which all social work majors must complete can be applied toward the 4000 hour internship if the social work internship was in a chemical dependency treatment setting. Nine hours of specialized chemical dependency courses chosen from among SOWK 4413, 4323, 4333, 4343, or 4363 are the equivalent of the 135 classroom hours required for licensure by Texas Commission on Alcohol and Drug Abuse (TCADA).

Admission to the Social Work Program:

Students must have completed twenty-four (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 the student by letter as to his/her 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.

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

Major (44 hours)

SOWK 2423, 2544, 2554, 3313, 3533, 3643, 3833, 3943, 3953, 4213, 4236, and 4246.

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 Foundation Core requirement in economics.

BIOL 2034. Satisfies part of the natural science requirement in the Academic Foundations Core.

Two semesters in one foreign language (Spanish preferred) satisfies the humanities part of Academic Foundations Core.

B. Additional required support courses. (24 hours)

PSYC 1103, 3603 and ENGL 3203 or ENGL 3523

Five (5) courses chosen from the following of which at least two (2) should be from Social Work:

SOWK 3453, 4323, 4333, 4343, 4363, 4413, 4423

PSYC/SOCL 3023

PSYC 3733, 3913, 4203

SOCL 2233, 3333, 3403, 3433, 3733, 3783, 3803, 4133, 4353, 4543, 4633

CRJU 1113, 2243, 2913

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

3(3-0)

Prerequisite: SOCL 1133 or PSYC 1103.

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, emphasizing human diversity and discusses policy and practice relevant to special populations. A 20-hour volunteer placement in a social service agency is required.

***2544. Human Behavior and the Social Environment I**

4 semester hours

Prerequisite: SOWK 2423.

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, and social and economic injustice, and spirituality. A 40-hour practicum is required, 10-hours in each of four different agencies.

***2554. Human Behavior and the Social Environment II**

4 semester hours

Prerequisite: SOWK 2544.

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 in each of four different agencies.

3313. Social Work Statistics

3(3-0)

Prerequisites: PSYC 1103, MATH 1003.

Introduction to descriptive and inferential statistics. Topics include data distributions, descriptive statistics, sampling distributions, interval estimation, one- and two-sample significant difference tests, one-way analysis of variance, correlation, and regression.

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.

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.

***3643. Social Work Research**

3(3-0)

Prerequisites: 6 hours of social work and SOWK 3313 OR consent of instructor.

This course is designed to familiarize the student with basic terminology of research, basic research design, methods for evaluating practice and social programs through qualitative and quantitative methods. It is also designed for the student to be able 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.

This course is designed to give students an understanding of group processes and to improve 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.

***4201, 4202, 4203. Special Projects** 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)

Prerequisites: SOWK 3833, 3943.

This course is designed to give 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.

***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.

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.

4333. Clinical Effects of Substance Abuse 3(3-0)

This course will present the physiological, psychological, and sociological aspects of substance abuse. Content includes aspects of family systems to include ethnocultural factors and relationships.

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.

4413. Employee Assistance Programs 3(3-0)

This course addresses the role of social work, employee assistance and human counselors in the work place. 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.

SOCIOLOGY

Emily E. LaBeff, Chair (O'Donohoe 124)

Professors: Clark, LaBeff, Williams

Assistant Professor: Stiles

Academic Foundations and Core Curriculum (see page)

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 .

Major (B.A. and B.S.) (33 semester hours)

SOCL 1133, 2233, 3633, 4153, 4803, PSYC 3313, and 15 advanced semester hours selected with the approval of the student's adviser.

For students pursuing the B.S. degree, additional courses, as listed below, are suggested for elective hours. The specific courses and number of hours should be discussed with a sociology adviser and tailored to the student's individual needs.

Fifteen hours chosen from any of the following:

SOWK 4323, 4333, 4343, 4363, or 4413

CRJU 2123 or 2243

POLS 3443, 3653, 4133, 4173, or 4443

PSYC 4113

JOUR 4683

ACCT 2143

HIST 4533

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 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 3(3-0)

Prerequisite: SOCL 1133 or consent of instructor.

Issues such 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.

- 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 3313, 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.
- 3733. Juvenile Delinquency** 3(3-0)
Prerequisite: SOCL 1133 or consent of instructor. May also be taken for psychology 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, 4002, 4003. Special Projects** 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. Ethnic Groups** 3(3-0)
Prerequisites: SOCL 1133, 2233, or consent of instructor.
Characteristics of the major racial and ethnic groups in America are examined. The source of the contact and subsequent reactions are emphasized.

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.
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 emphasis on the role of hospice as well as legal, moral, and medical ethics are included.
4543. **Aging** 3(3-0)
Prerequisites: 9 hours of sociology or consent of instructor.
The emergence of aging as a problem in industrial societies. Analysis of specific problems and programs relating to older persons in American society.
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. **Selected 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: 9 hours of sociology, majors or minors in sociology, or consent of instructor.
Field experience in selected agencies. May be repeated one time.
4803. **Applied Sociology** 3 semester hours
Prerequisites: 9 hours of sociology or consent of instructor.
This course is designed to incorporate 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.

COLLEGE OF SCIENCE AND MATHEMATICS

Norman V. Horner, Dean (Bolin Science Hall 111A)

The College of Science and Mathematics offers the following degrees:

Bachelor of Arts with major in Geology	see page
Bachelor of Arts with a major in Mathematics.....	see page
Bachelor of Science with a major in Biology	see page
Bachelor of Science with a major in Chemistry	see page
Bachelor of Science with a major in Chemical Technology	see page
Bachelor of Science with a major in Computer Science	see page
Bachelor of Science with a major in Environmental Science.....	see page
Bachelor of Science with a major in Geology	see page
Bachelor of Science with a major in Manufacturing Engineering Technology	see page
Bachelor of Science with a major in Mathematics	see page
Special Degree -- Bachelor of Science in Medical Technology.....	see page
Bachelor of Science with a major in Physics.....	see page
Master of Science with a major in Biology	see graduate catalog
Master of Science with a major in Computer Science.....	see graduate catalog

BIOLOGICAL SCIENCE

William B. Cook, Chair (Bolin Science Hall 218E)

Professors: Cate*, Grimes, Horner, Stangl

Associate Professors: Cook, Rincón-Zachary

Professors Emeriti: Dalquest, Scott

*Joint Appointment: Chemistry and Biology

The requirements for the degree of Bachelor of Science with a major in biology may be satisfied in any of three areas of emphasis.

- A. Molecular-cellular option
- B. Organismal option
- C. Pre-Professional (pre-medicine, pre-dentistry, pre-veterinary) option

(Teacher certification requirements - see page)

Academic Foundations and Core Curriculum (all options see page)

Major

Option A

Biology 1144, 1544, 3054, 3064, 3331, 3333, 3714, 4001; three advanced hours in both botany¹ and zoology²; three additional advanced hours (34 hours)

Option B

Biology 1144, 1544, 3054, 3064, 3331, 3333, 4001; three advanced hours in both botany¹ and zoology²; twelve additional advanced hours (39 hours)

¹Advanced Botany 3534, 4463, and 4564.

²Advanced Zoology 3024, 3033, 3133, 3234, 3343, 3434, 3643, and 4523

Option C

Biology 1144, 1544, 3054, 3064, 3144, 3234, 3331, 3333, 4001; 8 additional advanced hours (37 hours)

Minor

Option A

CHEM 1141, 1143, 1241, 1243, 3001, 3003, 3011, 3013, 3603, 4243 (22 hours)

Option B

Consult adviser for approved minor and specific courses, or may select Interdisciplinary minor: GEOL 1134, 1233, 3023, 3133; MATH 1233; STAT 3573 (19 hours)

Option C

Consult adviser for approved minor and specific courses.

Program Requirements (see Options, above)

Option A: MATH 1433, 1634, 1734, 2534; PHYS 1624, 2644

Option B: CHEM 1141, 1143, 1241, 1243, 3001, 3003; MATH 1433 or STAT 3573; PHYS 1144, 1244

Option C: MATH 1634; CHEM 1141, 1143, 1241, 1243, 3001, 3003, 3011, 3013; Either PHYS 1144 and 1244 or 1624 and 2644

Foreign Language 1134 and 1234 are required for options A-C.

REQUIREMENTS FOR A MINOR IN BIOLOGY (20 semester hours)

Biology 1144 and 1544 and an additional 12 semester hours, of which 6 must be advanced. Courses must be selected in consultation with chair.

COURSES IN BIOLOGY (BIOL)

1113. **Introduction to Medical Technology** 3(2-2)

An introduction to medical technology, professional ethics and the major disciplines in clinical laboratory sciences. Students perform basic laboratory experiments and learn the correlation between test results and common disease states.

1134. 1234. **Anatomy and Physiology** 4(3-3) 4(3-3)

Prerequisite for 1234: BIOL 1134.

Human anatomy and physiology. Structure of systems demonstrated by models, specimens, slides, and charts. Two semesters. Dissection of a mammal.

1144. **General Zoology** 4(3-2)

Survey of the animal world emphasizing the morphology, life cycles, and distribution of major phyla. Dissection of representative animals.

1544. **General Botany** 4(3-2)

Survey of the plant world emphasizing the morphology, life cycles, and distribution of representative groups.

2034. **Human Biology** 4(3-2)

Principles of biology and their application with special reference to the structure and functions of the human

body. Dissection of rat. May not be taken for credit if credit has been received for BIOL 1134 and 1234.

2333. **Nutrition** (formerly 1333) 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.

3004. **Microbiology** 4(3-2)

Prerequisites: One year of biology and one year of chemistry.

Introduction to the study of medically important bacteria, protozoa, viruses, helminths, and fungi. May not be applied to biology major.

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. Hunting license required. Field trips required.

3044. **Bacteriology** 4(3-3)

Prerequisites: One year of biology, CHEM 1241, 1243, or equivalent.

Morphology, physiology, and classification of bacteria; their economic relation to man. Laboratory exercises emphasize culture techniques and identification of bacteria.

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.

3113. **Biogeography** 3(3-0)

Prerequisites: BIOL 1144 and 1544.

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 and 3064, and one year of general chemistry; BIOL 3234, 3714, 3333, and one year of organic chemistry recommended.

General principles of physiology including the functional analysis of the nervous, muscular, cardiovascular, endocrine, digestive, and respiratory systems.

- 3203. Pathophysiologic Processes** 3(3-0)
Prerequisites: BIOL 1134, 1234, 3004, and one year of chemistry.
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.
- 3234. Comparative Anatomy of the Vertebrates** 4(3-3)
Prerequisites: One year of biology.
Organ systems of chordates considered in relation to each other with emphasis on mammalian groups. Dissection of representative animals.
- 3331. Genetics Laboratory** 1(0-2)
Prerequisite: Prior or concurrent enrollment in BIOL 3333.
Laboratory exercises illustrating basic principles of genetics using *Drosophila melanogaster*.
- 3333. Genetics** 3(3-0)
Prerequisites: One year of biology.
Fundamental principles of genetics and their application to living organisms.
- 3343. Vertebrate Embryology** 3(2-2)
Prerequisites: One year of biology.
Development of the typical vertebrate, emphasizing the development of the chick and pig.
- 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.
- 3643. Invertebrate Zoology** 3(2-3)
Prerequisites: One year of biology.
General principles of the invertebrates with special emphasis on structure and phylogeny.
- 3714. Cell Biology** 4(3-3)
Prerequisites: BIOL 3054 and 3064.
Organization, structure, and function of eukaryotic cells; energetics, intermediary metabolism and biosynthesis; cell surfaces, motility and communication; gene function and regulation of information flow; growth, reproduction and evolution.
- 4001. Seminar in Biology** 1(1-0)
Prerequisite: Restricted to senior biology or general science majors.
Recent advances in the biological sciences.
- 4023. Immunology** 3(3-0)
Prerequisites: One year of biology; one year of chemistry; (BIOL 3333 and either BIOL 3714 or CHEM 4243 recommended).
Fundamental principles of immunology to include cells and tissues of the immune system, immunoassays,

humoral and cell-mediated immune responses, molecular biology of the immune system, immune regulation, and application to clinical diagnostic procedures.

4043. Human Genetics 3(3-0)

Prerequisites: BIOL 3144, 3333; CHEM 3011, 3013.

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 3333.

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 3333, CHEM 3011, 3013, 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.

4443. Histology 3(2-2)

Prerequisites: One year of biology.

Cytology and histology of epithelium, connective tissue, muscular tissue, nerve tissue, and organology.

4523. Animal Parasitology 3(2-3)

Prerequisites: One year of biology.

Host-parasite relationships in representative groups, with emphasis on taxonomic, ecological, and preventive aspects.

4463. Plant Anatomy 3(1-4)

Prerequisites: BIOL 3054 and 3064.

Examination of cells and tissues that constitute the plant body.

4564. Plant Physiology 4(3-3)

Prerequisites: BIOL 3054, 3064, and CHEM 3003.

Examination of the physiological processes of higher plants: C-3, C-4, and CAM photosynthesis; photorespiration; phytochrome- and cryptochrome-mediated responses; tropisms.

4683. Ecology 3(2-2)

Prerequisites: One year of biology, MATH 1233; BIOL 3534 recommended.

Relationship of plants and animals to each other and to their environment.

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.

4911, 4912, 4913. Special Problems 1-3 semester hours

Prerequisites: A major in the program of biological sciences and consent of the college dean. (Also see prerequisites on page .)

Directed research and study in the field of the student's interest and preparation. A minimum of 45 laboratory hours per one semester hour credit.

CHEMISTRY

Rodney L. Cate, Chair (Bolin Science Hall 307B)

Professors: Cate, Rogers, Williams

Assistant Professor: Voegel

Instructor: Fulton

Professor Emeritus: Sund

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 three 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)

Academic Foundations and Core Curriculum: (see page)

Bachelor of Science: (see page)

Major

Option A

CHEM 1141, 1143, 1241, 1243, 3001, 3003, 3011, 3013, 3302, 3303, 3402, 3403, 3603, 3705, 4243, 4305, two hours of 4001. (Those students who wish to continue their studies in graduate biochemistry should take CHEM 4242 and 4253. Those students who wish to obtain ACS certification must take three additional advanced hours in chemistry, exclusive of 3504 and 4233.)

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 four 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 chairman 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, 3001, 3003, 3011, 3013, 3302, 3303, 3603, two hours of 4001, and either 3402 and 3403 or 4242 and 4243.

Minor

Option A

Professional Chemistry or Prechemical Engineering:

Mathematics (See page and the Chemistry Program Adviser for specific course requirements.) OR
Physics (see page and the Chemistry Program Adviser for specific course requirements); OR

Other (see the Chemistry Program Adviser for specific course requirements); OR
Professional Biochemistry - Biology (See page and the Chemistry Program Adviser for specific course requirements.)

Option B

Pre-Medical, Pre-Dental or Pre-Veterinary - Biology (See page and the Health Professions Adviser for specific course requirements.); OR

Business Emphasis - Business Administration (See page .); OR

Computer Science Emphasis - Computer Science (See page .)

Others (See your academic adviser.)

Additional Requirements:

Requirements common to both optional degree plans:

MATH 1233, 1433, 1634, and 1734; STAT 3573; PHYS 1624 and 2644; and one year of a foreign language.

Option A

MATH 2534, three additional advanced hours in the physical sciences or mathematics of which one hour represents laboratory or problems credit.

Option B

See the Health Professions Adviser for additional Pre-Veterinary medical requirements.

Electives

Additional hours to total a minimum of 124 (including kinesiology requirements).

REQUIREMENTS FOR A MINOR IN CHEMISTRY (22 semester hours)

CHEM 1141, 1143, 1241, 1243, and fourteen additional hours of which six must be advanced, exclusive of organic and introductory environmental chemistry.

Special Problems in CHEM 4911, 4922, 4933 may not be counted toward the minor in chemistry.

BACHELOR OF SCIENCE WITH A MAJOR IN CHEMICAL TECHNOLOGY

A program of study providing training for those students seeking careers in quality control, industrial or environmental technology.

The requirements for the Bachelor of Science with a major in chemical technology are as follows:

General: (see page)

Academic Foundations and Core Curriculum: (see page)

Bachelor of Science: (see page)

Major:

CHEM 1141, 1143, 1241, 1243, 3001, 3003, 3011, 3013, 3302, 3303, 3402, 3403, 3504, two hours of 4001, and 4505.

Minor:

Interdisciplinary - BIOL 1144, 1544, 3044, and three additional advanced hours in biology to be approved by the program chair; GEOL 1134 and 3023.

Program Requirements:

MATH 1233 and 1433; STAT 3573 and 3583; PHYS 1144 and 1244.

Electives

Additional hours to total a minimum of 124 (including kinesiology requirements).

COURSES IN CHEMISTRY (CHEM)

1101. **Introductory Chemistry Laboratory** 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)
Prerequisite: MATH 1003.
Recommended for students majoring in business, criminal justice, education, liberal arts, and associate health science programs. An introduction to chemical principles and concepts, environmental chemistry, nuclear chemistry, nutritional chemistry, and other topics.
1141. **General Chemistry Laboratory** 1(1-3)
Prerequisite: Concurrent enrollment in CHEM 1143.
Basic laboratory practice in chemistry.
1143. **General Chemistry** 3(3-0)
Prerequisites: Credit or concurrent enrollment in MATH 1233 and credit for either high school chemistry or CHEM 1103.
Atomic and molecular structure, periodic law, states of matter, reactions.
1203. **Introductory Chemistry** 3(3-0)
Prerequisites: CHEM 1103, 1143, or current high school chemistry.
Recommended for students in nursing and the allied health sciences. Essentials of organic and biochemistry.
1241. **General Chemistry Laboratory** 1(1-3)
Prerequisites: CHEM 1141 and concurrent enrollment in CHEM 1243.
Qualitative and quantitative analysis.
1243. **General Chemistry** 3(3-0)
Prerequisites: CHEM 1143 and MATH 1233.

Solutions, chemical thermodynamics, equilibrium, electrochemistry, and kinetics.

2900. Research Orientation

Prerequisite: Consent of instructor and program chair.
An introduction to research topics and methods.

3001. Organic Chemistry Laboratory

1(1-3)

Prerequisites: CHEM 1241 and concurrent enrollment in CHEM 3003.

Laboratory experiments to accompany CHEM 3003. Separation and purification techniques and quantitative methods in organic chemistry. An introduction to organic synthesis.

3003. Organic Chemistry

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.

3011. Organic Chemistry Laboratory

1(1-3)

Prerequisites: CHEM 3001 and concurrent enrollment in CHEM 3013.

Laboratory experiments to accompany CHEM 3013. Methods of organic synthesis, qualitative analysis, and spectroscopic techniques.

3013. Organic Chemistry

3(3-0)

Prerequisite: CHEM 3003 with a grade of C or better recommended.

A continuation of CHEM 3003. Includes properties, synthesis, and reactions of aldehydes, ketones amines, carboxylic acids, and derivatives, multi-functional, and aryl compounds. Spectroscopy of organic compounds.

3302. Analytical Chemistry Laboratory I

2(0-4)

Prerequisite: Concurrent enrollment in CHEM 3303.
Laboratory applications of analytical theory.

3303. Analytical Chemistry I

3(3-0)

Prerequisites: CHEM 1241 and 1243 and concurrent enrollment in CHEM 3302.

Theory of analytical methods. Volumetric, potentiometric, and spectrophotometric analysis, separation data handling.

3402. Analytical Chemistry Laboratory II

2(0-4)

Prerequisite: Concurrent enrollment in CHEM 3403.
Laboratory applications of analytical theory.

3403. Analytical Chemistry II

3(3-0)

Prerequisites: CHEM 3302, 3303, concurrent enrollment in 3402, and CHEM 3603 or consent of instructor.

Theory of analytical methods. Absorption, emission, scattering, reflection, and dispersion in spectroscopy and spectrometry. Electroanalytical, nuclear, thermal, and separation techniques.

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/Thermodynamics

3(3-0)

Prerequisites: CHEM 1241, 1243; MATH 1733; PHYS 1624 and 2644 or consent of instructor.

Classical and statistical thermodynamics, kinetic molecular theory and chemical kinetics.

- 3705. Physical Chemistry** 5(3-4)
Prerequisites: CHEM 3402, 3403, 3603, and credit or concurrent enrollment in MATH 2534.
Atomic and molecular structure, experimental physical methods, electrochemistry, theory of reaction rates, and physical chemistry laboratory practice.
- 4001. Seminar** 1 semester hour
Prerequisites: Six advanced hours in chemistry and four seminar attendance credits. (See your chemistry adviser for details.)
Participation in seminar presentations and discussions.
- 4133. Advanced Organic Chemistry** 3(3-0)
Prerequisite: CHEM 3013.
Reaction mechanisms, structure elucidation, stereoisomerism, and conformational analysis.
- 4233. Molecular Biology** 3(3-0)
Same as BIOL 4233, (p).
- 4242. Biochemistry Laboratory** 2(0-4)
Prerequisites: CHEM 3001 and credit or concurrent enrollment in CHEM 4243. CHEM 3011 recommended.
Experimental methods in biochemistry, including quantitative and qualitative techniques, enzyme kinetics, and separation methods for biomolecules.
- 4243. Biochemistry** 3(3-0)
Prerequisite: CHEM 3013.
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 3402, 3403, 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 Mechanics** 3(3-0)
(Same as PHYS 4353, page).
- 4505. Environmental Chemical Technology** 5(3-4)
Prerequisites: CHEM 3302, 3303, 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. Research Orientation**
Prerequisite: Consent of the instructor and program chair.

An introduction to research topics and methods.

4911, 4922, 4933. **Special Problems in Chemistry**

1-3 semester hours

Prerequisites: CHEM 4900; consent of instructor and program chair. See problem course 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.

COMPUTER SCIENCE

Ranette H. Halverson, Chair (Bolin Science Hall 126A)

Professors: Donovan, Hinds

Associate Professors: Carpenter, Halverson, Passos, Tucker

Assistant Professors: Kersten, Simpson

The requirements for the degree of Bachelor of Science with a major in computer science are as follows:

Academic Foundations and Core Curriculum (see page)

Bachelor of Science (see page)

Program Requirements

Major

Computer Science 1043, 1053, 2013, 2083, 2133, 3023, 3233, 4103, 4113, 4143, 4991, and twelve hours of computer science electives (nine advanced hours). Computer Science 1023 and 3533 may not be counted toward a major in computer science.

Minor to be selected in a field acceptable to the Chair of the major program. Students may also elect to minor in computer accounting applications which consists of: ACCT 2143, 2243, 3023, 3033, and six advanced hours.

Additional Requirements

ECON 2333

MATH 1634, 1734, 2333, and 3 hours from 3533, 3833, or 4243

PHYS 1624, 2644

STAT 3573

The requirements for a minor in computer science are Computer Science 1043, 1053, 2013, 2083, 2133, and nine hours computer science electives (six advanced hours) to be approved by chair. Computer Science 1023 may not be counted toward a minor in computer science.

The Computer Science Program at Midwestern State University is accredited by the Computer Science Accreditation Commission (CSAC) of the Computing Sciences Accreditation Board (CSAB), a specialized accrediting body.

COURSES IN COMPUTER SCIENCE (CMPS)

- 1023. Introduction to Computing** 3(2-2)
Prerequisite: ENGL 1003 or satisfactory score on placement exam.
Study of topics related to the use of computers, including history of computing, hardware, software, socioeconomic impact, data communications, the Internet, and World Wide Web. Hands-on laboratory introduces system operation and application of microcomputer-based software packages and World Wide Web. (May not count toward a CMPS major or minor.)
- 1043. Computer Science I** 3(3-0)
Prerequisite: Concurrent enrollment in MATH 1233.
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** 3(3-0)
Prerequisites: Minimum grades of C in CMPS 1043 and MATH 1233.
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.
- 2013. Assembly Language Programming** 3(3-0)
Prerequisite: Minimum grade of C in CMPS 1043.
Development, writing, and execution of assembly language programs for a contemporary computer architecture. Topics include introduction to the CPU architecture, data representation, addressing, encoding and decoding of program statements, integer arithmetic, logical operations, looping structure, table processing, and subroutine development and protocols. Emphasis is placed on program structuring.
- 2083. Computer Organization** 3(3-0)
Prerequisite: Minimum grade of C in CMPS 2013.
Study of functions and logical relationships of digital computer components including memories, processors, data channels, and input/output devices. Also covered are machine independent concepts such as data representation, addressing techniques, and a brief introduction to system software.
- 2133. Data Structures** 3(3-0)
Prerequisites: Minimum grades of C in CMPS 1053 and MATH 2333.
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.
- 3023. Microprocessors** 3(3-0)
Prerequisite: Minimum grade of C in CMPS 2083.
Study of topics related to modern microprocessors, including logic design, microprocessor architecture, interfaces, device drivers, interrupt systems, and performance parameters. Also the use of hardware description languages. Discussion of legal, social, and ethical issues.
- 3233. Theory of Computation** 3(3-0)
Prerequisites: Minimum grade of C in CMPS 2133 and MATH 2333.
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.
- 3533. Numerical Analysis** 3(3-0)

Prerequisites: CMPS 1043 and MATH 1734.

Use of numerical methods for function approximation, solutions of equations and systems of equations, differentiations, integration, and differential equations. Includes analysis, design, and writing of programs. (May not be counted toward a major in computer science. 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 2083 and CMPS 2133.

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 theory 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 2133 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. Data Base Management Systems 3(3-0)

Prerequisite: CMPS 2133.

A study of concepts, characteristics, design, and implementation of database management systems. Hierarchical, network, and relational approaches to DBMS designs are examined. Advanced models such as object-oriented databases and image retrieval systems are also discussed. Query languages are presented.

4143. Topics in Contemporary Programming Languages 3(3-0)

Prerequisites: CMPS 2083 and 2133.

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 program chair.

4213. Introduction to Computer Graphics 3(3-0)

Prerequisites: CMPS 2133 and MATH 1634.

Introduction to computer methods for generating graphical displays. Topics include bit-mapped graphics on microcomputers, plotting, and design of software for 2-dimensional and 3-dimensional displays.

4223. Modeling and Simulation 3(3-0)

Prerequisites: CMPS 2133 and STAT 3573.

Introduction to modeling and simulation of discrete systems with emphasis on queuing systems. Projects using high-level languages and a special purpose simulation language.

4233. Artificial Intelligence 3(3-0)

Prerequisite: CMPS 2133.

Knowledge representation, state space search techniques, image processing, pattern matching, machine reasoning, and problem solving using LISP.

4313. Interactive Multimedia Systems 3(3-0)

Prerequisite: CMPS 4213.

Introduction to design and programming of interactive multimedia applications. Emphasis is on event driven, object-oriented programming in the design and creation of applications utilizing sound, video, 3D graphics, and computer animation. Utilization of 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 2083 and CMPS 2133.

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 2083.

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.

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: Junior standing in computer science.

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. Special Problems 3 semester hours

Prerequisite: Consent of the chair.

Directed research in computer science.

ENGINEERING DRAWING

Professor: Sutko

Associate Professor: Faulk

Professor Emeritus: Brackeen

COURSES IN ENGINEERING DRAWING (ENDR)

1133. Engineering Graphics 3(2-4)

Prerequisite: MATH 1003 or satisfactory score on placement exam.

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.

2134. Computer Aided Drafting 4(2-4)

Prerequisite: ENDR 1133.

Introduction to hardware, software, and nomenclature used in computer aided drafting. Instruction in CAD operations and commands including applications and hands-on use.

ENVIRONMENTAL SCIENCE

Phillip D. Voegel, Chair (Bolin Science Hall 307E)

Professors: See Biology, Chemistry, and Geology

A program of study leading to the degree of Bachelor of Science with a major in environmental science is as follows:

The degree is an interdisciplinary program that covers the basic sciences. Environmental problems are multifaceted and require problem-solving skills that cover breadth in each of the sciences.

General: (see page)

Academic Foundations and Core Curriculum: (see page)

Bachelor of Science: (see page)

Major:

Interdisciplinary - ENSC 1114, 3103, 4103; BIOL 1144, 1544, 3044, 3534, 4683, CHEM 1141, 1143, 1241, 1243, 3302, 3303, 3504, 4505; GEOL 1134, 2134, 3023, 3234, 4634, plus a science seminar (4001) and four additional advanced hours from biology or geology.

Minor:

No minor required.

Program Requirements:

PHYS 1144 and 1244; MATH 1433; STAT 3573; two semesters of one foreign language.

COURSES IN ENVIRONMENTAL SCIENCE (ENSC)

1114. **Foundations of Environmental Science** 4(3-2)

An introduction to the discipline of environmental science as it relates to the principles of ecology and how the actions of man are influencing our environment. Major topics of discussion are ecosystems, the species concept (flora and fauna), human population, economics and politics, health issues, climatic changes, biodiversity, and natural resources.

3103. **Environmental Policies and Laws** 3(3-0)

Prerequisites: Two science courses which include ENSC 1114; POLS 1333, 1433.

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 geology either combined or separately.

Field experience in selected agencies.

See Biology, Chemistry, and Geology described in the respective program areas of the catalog.

GEOLOGY

M. John Kocurko, Chair (Bolin Science Hall 102A)

Professors: Kocurko, Watkins

A program of study leading to the
Bachelor of Arts degree

Option A: Emphasis in **Geology**

Option B: Emphasis in **Earth Science**

(For teacher certification only)

Major

All Options: GEOL 1134, 1233, 2134, 3234.

Option A: GEOL 3734, 3434, 3534, 3633, 4634, 4001.

Option B: GEOL 3734, 3534, 3023, 3133, 4001, GEOG 3003.

Minor:

To be chosen in consultation with the student's adviser, and approved by the program chair.

Academic Foundations and Core Curriculum (all options see page)

Program Requirements

Option A

CHEM 1141, 1143, 1241, 1243, or the sequence CHEM 1101, 1103 and BIOL 1144 or 1544. PHYS 1144, 1244. MATH 1233 and 1433. Six hours of sophomore literature, and two years of a single foreign language (or the equivalent of one language through the second year). See page .

Option B

CHEM 1141, 1143, or 1101, 1103, PHYS 1533, MATH 1233. Six hours of sophomore literature, and two years of a single foreign language (or the equivalent of one language through the second year level). See page .

Twenty four additional hours of approved courses in education are needed for teacher certification. Option B may be chosen as a "second teaching field" for teacher certification after completion of GEOL 1134, 1233, 2134, 3023, 3133, plus 7 additional hours (6 of which must be advanced).

A program of study leading to the
Bachelor of Science degree

Option C. **Geology** (Graduate school preparation)

Major

Option C

GEOL 1134, 1233, 2134, 3234, 3434, 3534, 3633, 3734, 3836, 4233, 4634, and one semester of 4001.

Minor

Option C

Minor to be chosen in consultation with the student's adviser, and approved by the program chair. A minor in biology, chemistry, physics, mathematics, computer science, or engineering technology is strongly

recommended.

Academic Foundations and Core Curriculum (all options see page)

Program Requirements

Option C: CHEM 1141, 1143, 1241, 1243, PHYS 1144, 1244, MATH 1634 and 1734. One year of a single foreign language.

Requirements for a minor in Geology

GEOL 1134, 1233, and 11 additional hours in geology, six of which must be advanced.

COURSES IN GEOLOGY (GEOL)

1134. **Physical Geology** 4(3-2)
Elements of earth science including the study of earth materials, interpretation of geologic evidence, and study of geological processes.
1233. **Historical Geology** 3(2-2)
Geologic history and evolution of the Earth, including the life histories of plants and animals.
2134. **Mineralogy** 4(3-3)
Prerequisites: GEOL 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.
3023. **Environmental Science** 3(2-3)
Prerequisites: One year of college level science is recommended.
A study of the earth as a habitat; conservation of resources, land-use planning and pollution problems arising from intensive use of the land by increasing numbers of people.
3133. **Oceanography and Meteorology** 3(2-3)
Prerequisite: GEOL 1134 or consent of the instructor.
An introduction to the earth's fluid environment; physical, chemical, biological, and geological oceanography.
3234. **Petrology** 4(3-3)
Prerequisite: GEOL 2134 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(3-3)
Prerequisites: GEOL 3234, MATH 1433, or consent of the instructor.
A survey of topics in structural geology, including rock mechanics, classification of structural features, and geotectonics. Laboratory work emphasizes techniques in the solution of both surface and subsurface problems, field mapping, and geophysical techniques.
3534. **Invertebrate Paleontology** 4(3-3)
Prerequisites: GEOL 1134, 1233.
An introduction to the study of fossil invertebrates, including comparison of living and fossil forms, their morphology, classification, ecology, and geologic history.

3633. **Stratigraphy** 3(3-0)
Prerequisite: GEOL 3534 or consent of the instructor.
An introduction to the study and interpretation of stratified sedimentary rocks, including their identification, description, condition of origin, sequence, mapping, and correlation.
3734. **Geomorphology** 4(3-3)
Prerequisites: GEOL 1134 and 1233, 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. The course also includes an introduction to planetary geomorphology. Laboratory work emphasizes the use of topographic maps and aerial photography for geomorphic and geologic interpretation.
3836. **Field Geology** 6(3-6)
Prerequisite: GEOL 3434 or consent of the instructor.
Techniques of geologic surveying utilizing Brunton compass, barometer, air photos, plane table, and alidade. Measuring, mapping, and interpretation of geologic structures and stratigraphy as observed in the field.
4001. **Seminar** 1(1-0)
Prerequisite: Consent of the instructor.
Participation in seminar discussions, and presentation of formal reports.
4233. **Hydrogeology** 3(2-3)
Prerequisites: GEOL 1134, 1234, or consent of the instructor.
This course deals with the interrelationships of geologic materials and processes with water. Water resources will be examined based on occurrence, movement, and chemistry.
4334. **Advanced Topics in Geology** 4(3-3)
Prerequisite: Consent of the instructor.
Lectures, discussion, reading, and/or laboratory work on advanced topics in geology.
4634. **Sedimentology** 4(3-3)
Prerequisite: GEOL 3234 or the consent of the instructor.
Analysis of depositional environments based on the chemical and physical formation of sediment, the physics of sediment transport, and post-depositional diagenetic phenomena. Laboratory work emphasizes textural analysis of sediments and petrographic analysis of thin sections, general statistical analysis and report preparation.
- 4911, 4912, 4913. **Special Problems in Geology** 1-3 semester hours
Prerequisites: Upper level classification and consent of the program chair and instructor.
Directed field and laboratory research in problems of geological interest.

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.

**THE CHARLES AND ELIZABETH PROTHRO
DISTINGUISHED PROFESSORSHIP OF GEOLOGICAL
SCIENCES ENDOWED BY PERKINS-PROTHRO
FOUNDATION OF WICHITA FALLS**

The endowment was established in 1986 to support the work and research of a professor in the geology-geophysics program. The professorship provides an annual stipend and support for research, travel, and publication costs.

Dr. M. John Kocurko, Professor of Geology, is the first person to be designated for this professorship. He holds the Ph.D. from Texas Tech University, and he is the author of numerous articles. He is involved in research projects in the following areas: sedimentology and vertebrate paleontology of the Baylor County, Texas area; fossil Octocorallia of the Gulf Coast region; modern Octocorallia of the Texas coast; geomicrobiology and its relationship with mineral diagenesis; environmental pollution due to drilling of wells. Dr. Kocurko's research projects extend from the Texas Panhandle to the Wichita Falls area and to several coastal studies from Texas to Florida.

**MANUFACTURING ENGINEERING
TECHNOLOGY**

Jerry D. Faulk, Chair (McCullough Hall 101)

Professor: Sutko

Associate Professor: Faulk

Assistant Professor: Brink

The requirements for the degree of Bachelor of Science with a major in manufacturing engineering technology are as follows:

Academic Foundations and Core Curriculum (see page)

Bachelor of Science (see page)

Program Requirements:

Major

MENT 1334, 1342, 2123, 2143, 3103, 3134, 3333, 3403, 3503, 4103, 4113, 4213, 4603, 4742, and 3 semester hours selected from 4911 and 4912.

Additional Requirements

ENDR 1133, 2134

MATH 1433, 1634, 1734

PHYS 2014, 2114

CHEM 1141, 1143

PHYS 1144, 1244 (or PHYS 1624, 2644)

CMPS 1043

ENGL 3203

STAT 3573, 3583

Mathematics-Statistics minor for this degree will consist of MATH 1233, 1433, 1634, 1734, and STAT 3573, 3583.

The requirements for a minor in Manufacturing Engineering Technology are MENT 1334, 2123, 2143, 3134, and six additional hours of MENT courses, at least three of which must be advanced.

COURSES IN MANUFACTURING ENGINEERING TECHNOLOGY (MENT)

1334. **Fluid Power I** (formerly 2334) 4(2-4)
The study of components used in hydraulic and pneumatic systems. The students will also learn to size components, analyze, and design fluid power circuits using ANSI fluid power diagrams.
1342. **Fluid Power II** (formerly 2343) 2(1-2)
Prerequisite: MENT 1334.
The study and design of hard-wired electrical ladder logic as applied to fluid power circuits. The student will also learn to analyze cartridge valve circuits. The students work in groups and design and build a machine tool using fluid power and mechanical components with electrical ladder logic.
2123. **Manufacturing Processes I** (formerly 1123) 3(2-3)
General introduction to materials, processes, and equipment used in manufacturing. Includes industrial tours. Laboratory emphasis will be on machine tool processes.
2143. **Manufacturing Processes II** (formerly 1143) 3(2-3)
Theory of welding, casting, powder metallurgy, and other processes. Includes industrial tours. Laboratory emphasis will be on welding processes.
3103. **Statics** 3(3-0)
Prerequisite: MATH 1433.
Composition and resolution of forces. Equilibrium of forces acting on structures and machines. Friction, moments, couples, centroids, and moments of inertia.
3134. **Material Science** 4(2-4)
Prerequisites: MATH 1233, CHEM 1143 or high school chemistry.
The study of the physical and mechanical characteristics of materials and an emphasis on building and manufacturing materials. The effect of chemical composition, mechanical treatment, and thermal or heat treatment upon material properties will be discussed.
3333. **Engineering Economy** 3(3-0)
Prerequisites: Junior standing, MATH 1233.
Application of economic analysis to engineering decisions. Considerations include cost, value, depreciation, interest, worth, rate of return, and inflation. Use of a computer to solve problems will be required.
3403. **Automation I** (formerly 4403) 3(2-2)
Prerequisite: MENT 1342 or a knowledge of electrical ladder logic. The student must have a knowledge of a high level computer language such as taught in CMPS 1043.
The study of PLC's, robotics, design for automation, automated material handling and storage systems, automated inspection, fixed and flexible automation.
3503. **Automation II** (formerly 4502) 3(2-2)
Prerequisite: MENT 3403, PHYS 1244 or 2014.
The study of CNC, DNC, servo feedback systems (in particular servo hydraulic feedback systems), computer integrated manufacturing, shop floor control, flexible manufacturing systems, and additional PLC programming.

4103. **Strength of Materials** 3(3-0)
 Prerequisites: MATH 1634, MENT 3103.
 Stress and strain and their relation to loads. Axial, torsional and bending loads, beam deflection, columns and combined stresses. Applications emphasized.
4113. **Basic Instrumentation** (formerly 3113) 3(2-2)
 Prerequisite: PHYS 1244 or 2014.
 Measurement of temperature, pressure, flow and other variables. Study of sensing and transmission of pneumatic and electrical signals for use in industrial control systems. Use of a computer for wordprocessing and graphing will be required.
4213. **Thermodynamics** (formerly 3213) 3(3-0)
 Prerequisites: PHYS 1144, MATH 1634.
 Basic scientific principles of energy and behavior of substances as related to engines and systems. Gas laws, vapors, and engine cycles.
4603. **Production Planning and Control** 3(3-0)
 Prerequisite: ENDR 2134.
 Forecasting, motion and time study, inventory control, ergonomics, learning curves, optimization techniques, safety, plant layout, concurrent engineering, design for manufacturing, and related topics such as maintenance.
4742. **Capstone Project** 2(0-4)
 Prerequisites: Senior standing and written permission of the program chair. (Student must be within two regular semesters of graduation, or must have finished all required MENT courses.)
 A senior project utilizing the knowledge the student has gained from MENT courses. The project will be conducted at a local manufacturer and will require a report and a presentation.
- 4911, 4912. **Selected Topics** 1-2 semester hours
 Prerequisite: Consent of the instructor.
 Selected topics in manufacturing engineering technology. May be repeated for credit when topics vary.

MATHEMATICS

William E. Hinds, Chair (Bolin Science Hall 113)

Professors: Donovan, Hinds

Associate Professors: Farris, Fosnaugh, Halverson, Schmitter, Tucker, Warndof

Assistant Professors: May, Rowell, Simpson, Slavens, Spiller

Instructors: Belcher, Layton, Snow

Professors Emeriti: Huffman, Meux

The requirements for the Bachelor of Arts and Bachelor of Science degrees with majors in mathematics are as follows:

Academic Foundations and Core Curriculum (see page)

Bachelor of Science (see page)

Bachelor of Arts (see page)

Program Requirements

Major

Mathematics 1634, 1734, 2534, 3293, 3833, either 4733 and 4833, or 4133 and 4143, plus nine additional advanced hours exclusive of Math 3113.

Additional Requirements

Consult adviser for approved minor and specific courses.

CMPS 1043

Either CMPS 1053 or EDUC 3153, EDUC 3163, EDUC 3433 and EDUC 4423

STAT 3573 or MATH 4143

Requirements for a minor in Mathematics.

Eighteen hours of mathematics to include 1634, 1734, 2534, and six advanced hours exclusive of 3113 and 3133.

CREDIT BY EXAMINATION

A maximum of eight hours of mathematics credit may be obtained by proficiency examinations. These examinations are given in the areas of algebra, trigonometry, and calculus. 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 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** 3(3-0)
Prerequisite: MATH 1003 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** 3(3-0)
Prerequisite: MATH 1003 or satisfactory score on placement exam.
Review of algebra, linear and quadratic equations, graphs, progressions and mathematics of finance, matrix operations, and introduction to probability.
1233. **College Algebra** 3(3-0)
Prerequisite: MATH 1003 or satisfactory score on placement exam.
Equations, inequalities, rational expressions, exponents, radicals, functions, graphs, and systems of equations and inequalities. Each student must have a graphing calculator. (This course is designed for students planning to take additional mathematics.)
1433. **Plane Trigonometry** 3(3-0)
Prerequisite: MATH 1233 with grade of C or better.
Trigonometric functions, identities and equations, logarithms, complex numbers. Each student must have a

graphing calculator.

- 1634. Calculus I** 4(4-0)
Prerequisites: MATH 1233 and 1433 with grades 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** 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** 3(2-2)
Prerequisite: MATH 1003 with a grade of C or better.
The language of mathematics; the theory of sets, relations and functions; the theory and structure of number systems; the integers, rational numbers, elementary number theory, and the mathematical basis for the use of manipulatives.
- 2043. Structure of the Number System II** 3(2-2)
Prerequisite: MATH 2033.
Real numbers, an introduction to probability and statistics, geometric shapes, constructions and measurement, and the mathematical basis for the use of manipulatives.
- 2333. Discrete Mathematical Structures** 3(3-0)
Prerequisites: MATH 1233 and knowledge of a high-level programming language.
Logic, combinatorics, functions, graphs, Boolean algebra, logic networks, algebraic structures, finite state machines, and computability.
- 2534. Calculus III** 4(4-0)
Prerequisite: MATH 1734.
Space geometry and vectors, vector-valued functions, partial differentiation with applications, and multiple integration with applications. Each student must have a graphing calculator.
- 3113. Techniques in Problem Solving** 3(3-0)
Prerequisites: MATH 1233, 2043.
Problem solving techniques and strategies using patterns, logic, number theory, algebra, geometry, combinatorics, strategy games, and network theory.
- 3133. Foundations of Geometry** 3(3-0)
Prerequisites: Nine hours of math (exclusive of 0003 and 1003).
Elementary geometry from an advanced point of view, the reformulation of basic concepts in terms of modern mathematics and other modern concepts of geometry.
- 3293. Algebraic Structures** 3(3-0)
Prerequisites: Nine hours of math (exclusive of 0003 and 1003).
Introduction to algebraic structures; groups; rings; fields; introduction to vector spaces.
- 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 including series methods; introduction to phase plane analysis and non-linear problems.

3533. Numerical Analysis 3(3-0)
Prerequisites: MATH 1734 and CMPS 1043.
Use of numerical methods for function approximation, solution of equations and systems of equations, differentiation and integration, and solution of differential equations. Involves analysis, design, and writing of programs. MATH 3533 and CMPS 3533 cannot both be taken for credit.

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

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)
Prerequisite: MATH 4133.
Sampling distributions, point and interval estimation, hypothesis testing, goodness of fit, ANOVA, correlation, and regression.

4223. Discrete Mathematics 3(3-0)
Prerequisites: 12 hours of math (exclusive of 0003 and 1003).
Combinatorics, graph theory, and difference equations.

4243. Operations Research I 3(3-0)
Prerequisites: MATH 1734 and CMPS 1043.
A study of linear programming including convex sets, geometric solutions, simplex methods, duality, sensitivity analysis, and integer programming.

4253. Operations Research II 3(3-0)
Prerequisites: MATH 4243 and STAT 3573.
Network analysis, game theory, waiting line models, simulation, dynamic programming, and nonlinear programming.

4293. Introduction to Ring Theory 3(3-0)
Prerequisite: MATH 3293.
Foundations of ring theory including properties of modular rings, integral domains, ideals, quotient rings, ring homomorphisms, polynomial rings, and fields.

4453. Theory of Numbers 3(3-0)
Prerequisites: 12 hours of math.
Divisors and prime numbers; congruences; primitive roots; quadratic residues; continued fractions.

4573. **Complex Analysis** 3(3-0)
 Prerequisite: MATH 2534.
 Functions of one complex variable, Cauchy integral formula, Taylor series.
4733. **Introductory Analysis I** 3(3-0)
 Prerequisites: MATH 1734, 3293, or consent of instructor.
 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. **Special Problems** 1-3 semester hours
 Prerequisite: Consent of the chair (see page).
 Directed research in mathematics.

PHYSICS

Richard Fleming, Chair (Bolin Science Hall 307C)

Associate Professor: Fleming

Assistant Professor: Rhoads

Professors Emeriti: Holverson, Sims

The requirements for the degree of Bachelor of Science with a major in physics are as follows:

Major (32 hours)

Physics 1624, 2644, 3313, 3323, 3333, 3343, 4303, 4323, 4343, 4353

Minor (18 hours)

Mathematics 1634, 1734, 2534, 3433, 3833

Academic Foundations and Core Curriculum (see page)

Program Requirements

CHEM 1141, 1143, 1241, 1243

Requirements for a Minor in Physics

PHYS 1624, 2644, and twelve additional hours of which six must be advanced.

COURSES IN PHYSICS (PHYS)

1144. **General Physics** 4(3-2)
 Prerequisite: MATH 1433 or consent of program chair.
 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** 4(3-2)
Prerequisite: PHYS 1144.
Electricity and magnetism, optics, and modern physics. The second 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.
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** 4(3-2)
Prerequisite: Credit or registration in MATH 1634.
The first part of a two-semester course in classical and modern physics for students majoring in science.
2014. **Electronics I** 4(3-2)
Prerequisite: MATH 1433 or consent of program chair.
Units, electric fields, DC series and parallel circuits, Kirchoff's Laws, network analysis, and AC circuits.
2114. **Electronics II** 4(3-2)
Prerequisite: PHYS 2014.
Introduction to semiconductor devices, basic amplifiers and feedback, symbolic logic, Boolean algebra, basic TTL gates, counters and flip-flops, shift registers.
2644. **Electricity and Magnetism and Optics** 4(3-2)
Prerequisites: PHYS 1624; credit or registration 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; credit 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** 3(3-0)
Prerequisites: PHYS 2644 and credit for or registration in MATH 2534 or 3433.
A mathematical treatment of classical electromagnetic theory. Topics include electrostatics, electrodynamics, vector calculus, and Maxwell's equations and their applications.
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 registration 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, and group presentations.
4323. **Optics** 3(3-0)
 Prerequisites: Credit or registration in MATH 2534, PHYS 2644.
 A mathematical treatment of the modern theory of optics. Topics include Huygen's principle, interference, diffraction, polarization, crystal optics, electromagnetic theory of light, the interaction of light with matter, and quantum optics.
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 Schroedinger equation, one dimensional systems; the Heisenberg uncertainty principle; magnetic moments and angular momentum; two and three dimensional systems; approximation methods; scattering theory.
4833. **Theoretical Problems** 3 semester hours
 Prerequisite: Permission of the chair of Physics.
4933. **Experimental Problems** 3 semester hours
 Prerequisite: Permission of the chair of Physics.

STATISTICS

Professor: Hinds

Associate Professor: Schmitter

COURSES IN STATISTICS (STAT)

3573. **Probability and Statistics** 3(3-0)
 Prerequisite: MATH 1233.
 Descriptive analysis, probability, variability, confidence intervals, hypotheses testing, analysis of variance, correlation and regression, nonparametric statistics.
3583. **Statistical Quality Control** 3(3-0)
 Prerequisite: STAT 3573.
 Control charts, tolerance limits, acceptance sampling, 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.

**CONTINUING
EDUCATION**

CONTINUING EDUCATION

Press Building, Corner of Caddo Trail and Council Drive

Continuing Education is a community oriented service provided through non-credit, personal enrichment courses, seminars, conferences, and workshops designed to meet your needs and educational requirements.

Continuing Education works with businesses, industries, and agencies to develop in-house programs; to develop, coordinate, and implement conferences, seminars, and institutes or other special programs; and to co-sponsor programs with interested groups, agencies, or professional organizations. Programming may be flexible and scheduled to fit the particular goal to be attained.

The University reserves the right to substitute speakers or instructors if unavoidable circumstances make it necessary.

Certificates and Continuing Education Units For Professional Development

Formal recognition is awarded for the completion of Continuing Education professional or skill programs through the issuance of Continuing Education Units (CEU) and a certificate. A CEU is a nationally recognized, standard unit of measurement awarded for every ten contact hours of participation in an organized Continuing Education experience, under responsible sponsorship, capable direction, and qualified instruction. The programs were reviewed by the International Association for Continuing Education and Training and on September 22, 1994, received approval to award Continuing Education Units as an "Authorized CEU Sponsor."

Registration and Tuition Policies

Schedules for fall, spring, and summer classes are printed regularly and will be mailed upon request. Schedules include general information, course descriptions, and tuition fees for each course. Pre-registrations are required. Tuition payment for all classes, seminars, institutes, and workshops is due and payable upon registration. Payment by Visa, MasterCard, or Discover is available. Also, we will be glad to bill your company.

Enrollment for MSU Continuing Education courses is accepted by mail, by telephone, by e-mail, by fax, or in person. To enroll by mail, send name, address, and check (payable to Midwestern State University) to Continuing Education, Midwestern State University, Wichita Falls, Texas 76308. To enroll by telephone, call (940) 397-4307 or (940) 397-4756. To enroll by fax, fill out the information needed and fax to (940) 397-4042. Please note the course or courses for which you are registering. To enroll in person, come to the Press Building, corner of Caddo Trail and Council Drive on the MSU campus.

Telephone calls, faxes, and e-mails are considered tentative registration pending receipt of check, money order, Visa, MasterCard, or Discover. For classes that have a limited number of persons, registration accompanied by checks, money orders, or VISA/MasterCard/Discover approval takes precedence.

To enroll by e-mail, log onto Midwestern State University's web page at www.mwsu.edu and click on Continuing Education which contains a registration form.

Refunds

If a course fails to materialize, a full refund will be made to the enrollee. The University reserves the right to discontinue any classes for which enrollment is not sufficient to justify the offering. Enrollees requesting a refund must call the office.

A \$10 administration fee will be made if an enrollee drops a class for any reason after registering but before the first class meeting.

A 50% refund will be made if withdrawal occurs before the second meeting of a class for all courses except for studio art courses. For studio art classes, withdrawal will be allowed until the third meeting of classes.

No refund will be made after the second meeting of a class (third meeting, studio art) unless specific problems occur and the refund is approved by the director.

Classes which have a \$10.00 tuition fee or less are not subject to any refund.

Seminars and workshops have a different refund policy.

Important Information on Parking

Ample space in non-reserved parking is available on campus. HOWEVER, state regulations require all cars parking on campus to be registered. This may be done by going to the University Police Office and paying a \$4.00 parking fee (hours: Monday - Tuesday, 7:00 a.m. - 7:00 p.m.; Wednesday - Friday, 7:00 a.m. - 5:00 p.m.) If you do not wish to park on campus, there is space on Taft directly in front of

Hardin Administration Building or on the streets east of Taft.

No matter what one's personal reasons may be, we wish to encourage involvement in life-long educational experiences. To paraphrase the Carnegie Commission on Higher Education: Education is a lifelong process--one never loses the ability to learn.

**FACULTY DIRECTORY
AND AWARDS**

**University Faculty
Emeriti Faculty and Administration
Hardin Professors and Scholars
Faculty Award**

**THE UNIVERSITY FACULTY
2000-2002**

The date indicates year of original appointment.

ALLEN, SCOTT, **Media Librarian and Instructor**, 1992
B.G.S., M.L.I.S., Louisiana State University

ARCHAMBO, LARRY, **Associate Professor of Music**, 1988
B.M.E., Oral Roberts University; M.M., D.M.A., University of Kansas

ASH, RICHARD M., **Chair and Professor of Art**, 1968
B.F.A., M.F.A., Wichita State University

BARBER, ROBBIE, **Assistant Professor of Art**, 1994
B.F.A., East Carolina University; M.F.A., University of Arizona-Tucson

BARBER, WILLIAM H., **Professor of Education**, 1972
A.B., M.A., Ed.S., University of Alabama; Ed.D., University of Southern Mississippi

BARNETT, DANA S., **Instructor in English**, 1989
B.S., M.A., Midwestern State University

BAUER, KATHLEEN E., **Assistant Professor of Accounting**, 1981
B.S., Northwestern State University of Louisiana; M.A., University of Alabama; CPA, Louisiana and Texas

BELCHER, SANDRA, **Instructor in Mathematics**, 1993
B.S., Midwestern State University; M.S., University of North Texas

BENNETT, CARLA, **Chair and Assistant Professor of Mass Communication**, 1985
B.A., M.A., Midwestern State University

BISBEE, CAROL E., **Assistant Professor of Social Work**, 1997
B.A., Midwestern State University; M.S.S.W., University of Texas at Arlington

BISHOP, SARA E., **Assistant Professor of Nursing**, 1997
B.S.N., Indiana State University; M.S.H.P., Southwest Texas State University

BLACK, ALAN P., **Assistant Professor of Music**, 1987
B.A., Brigham Young University; M.A., Boise State University

BREEN, ALLISON, **Reference Librarian and Instructor**, 1973
B.A., M.A., Midwestern State University; M.L.S., University of North Texas

BRINK, JAN W., **Assistant Professor of Manufacturing Engineering Technology**, 1985
B.S., M.S., Texas Tech University; Ph.D., University of Texas at Arlington

BROWN, DAN L., **Instructor in Kinesiology and Athletic Trainer**, 1993
B.S., Lubbock Christian University; M.S.S., United States Sports Academy

BUCHANAN, STAN C., **Assistant Professor of Political Science**, 1997
B.A., California Baptist College; M.P.A., Baylor University; Ph.D., University of Tennessee-Knoxville

BUGG, NADIA A., **Graduate Coordinator and Professor of Radiologic Sciences**, 1994
B.S., University of Central Arkansas; M.A., Louisiana Tech University; Ph.D., Louisiana State University

BULTENA, CHARLES D., **Assistant Professor of Management/Marketing**, 1996
B.B.A., M.B.A., Midwestern State University; Ph.D., University of North Texas

BURKE, WILLIAM C., **Chair and Associate Professor of Respiratory Care**, 1996
B.S., Bloomsburg State College; Ph.D., The Pennsylvania State University

BURKS, SHANNON K., **Instructor in Kinesiology and Head Women's Basketball Coach**, 1999
B.A., Evangel College; M.S., Henderson State University

BUTLER, JOHN EDWARD, **Instructor in Kinesiology and Assistant Football Coach**, 1999
B.A., Catholic University of America

CAPPS, OSCAR EMERSON, **Dean of the Gordon T. and Ellen West College of Education and Associate Professor of Education**, 1970
B.S.Ed., Northeastern State College; M.Ed., Ed.D., University of Arkansas

CARPENTER, EMILY, **Associate Professor of English**, 1967
B.A., Centre College; M.A., Ph.D., Indiana University

CARPENTER, STEWART B., **Graduate Coordinator and Associate Professor of Computer Science**, 1978
B.A., M.C.S., Ph.D., Texas A&M University

CATE, RODNEY L., **Chair and Professor of Chemistry**, 1978
B.S., Tarleton State University; Ph.D., Arizona State University

CHURCH, SANDRA J., **Chair and Assistant Professor of Nursing**, 1974
B.S.N., Texas Woman's University; M.S.N., University of Texas at Arlington

CLANCEY, HENRY, **Instructor in the Intensive English Language Institute**, 1998
B.A., Louisiana State University; M.A., Monterey Institute of International Studies

CLARK, ROBERT E., **Associate Vice-President for Academic Affairs and Professor of Sociology**, 1973
B.A., M.A., Baylor University; Ph.D., University of Montana

CODDINGTON, DAVID G., **Assistant Professor of Psychology**, 1999
B.A., University of North Carolina; M.A., Appalachian State University; Ph.D., Georgia State University

COE, MARY ANN, **Associate Professor of Education**, 1997
B.S., Holy Family College; M.Ed., Beaver College; D.Ed., Pennsylvania State University

COFFEY, SUE, **Serials Librarian and Instructor**, 1974
B.S., M.L.S., Texas Woman's University

COLLINS, CAROL L., **Assistant Professor of Nursing**, 1993
B.S.N., Texas Christian University; M.S., Texas Woman's University

COLLINS, MICHAEL L., **Dean of the College of Liberal Arts and Professor of History**, 1985
B.A., M.A., Ph.D., Texas Christian University

COOK, WILLIAM B., **Chair and Associate Professor of Biology**, 1991
B.S., University of Washington; M.S., Central Washington University; Ph.D., University of Missouri

CREWS, NORVAL D., **Assistant Professor of Music**, 1970
B.M., M.M.E., University of North Texas

CRUMP, MARTHA H., **Assistant Professor in Dental Hygiene**, 1986
A.A.S., Bee County College; B.S.D.H., M.E., Midwestern State University

CUEVAS, JACQUELINE, **Associate Professor of Psychology**, 1984
B.A., Mundelein College; M.A., Ph.D., Southern Illinois University

CURRAN, BARBARA, **Assistant Professor of Dental Hygiene**, 1998
B.S., Baylor University College of Dentistry; M.Ed., Midwestern State University

CYS, JOHN M., **Catalog Librarian and Instructor**, 1995
B.A., M.S., University of Colorado; M.S.L.S., University of North Texas

DAVIS, FREDRIC C., **Associate Professor of Dental Hygiene**, 1990
B.S., D.M.D., University of Oregon; M.S., University of Iowa

DAVIS, LARRY HILMAN, **Associate Professor of Art**, 1969
B.S., Weber State College; M.F.A., Utah State University

DeBOIS, BARBARA J., **Chair and Assistant Professor of Dental Hygiene**, 1983
A.S.D.H., B.S.D.H., Midwestern State University; M.S., Texas Woman's University

DIEKHOFF, GEORGE M., **Graduate Coordinator, Chair, and Professor of Psychology**, 1977
B.A., Nebraska Wesleyan University; M.A., Ph.D., Texas Christian University

DISTEL, MARY J., **Assistant Professor of Nursing**, 1996
B.S.N., University of Florida; M.S., Wright State University

DONOVAN, JOANNE S., **Instructor in Foreign Languages**, 1988
B.A., State University of New York at Buffalo; M.A., Middlebury College

DONOVAN, TIMOTHY P., **Professor of Computer Science**, 1987
B.S., Regis College; M.A., Oklahoma University; Ph.D., Colorado University; M.S., Shippensburg University

DOVER, ERNEST A., **Graduate Coordinator and Associate Professor of Political Science**, 1985
B.A., Winston-Salem State University; M.A., Ph.D., Kent State University

DOWD, JOHN F., **Associate Professor of Education**, 1989
B.S., LeMoyne College; M.S., Ed.D., Syracuse University

DU, HONGWEI, **Assistant Professor of Business Computer Information Systems**, 1998
B.S., Shandong University; M.S., Bowling Green State University; Ph.D., Florida Institute of Technology

DUAN, XIANSHENG JASON, **Assistant Professor of Management/Marketing**, 1999
B.S., Wuhan University; M.B.A., Ph.D., University of Illinois

DUDLEY, PATRICK H., **Associate Professor of Kinesiology**, 1969
B.S., M.Ed., Sam Houston State University; Ph.D., Texas A&M University

EBNER, ADDIE L., **Instructor in Foreign Languages**, 1995
B.A., Texas Tech University; M.A., Instituto de Filogogia Hispanica

ESTRADA, ANITA, **Graduate Coordinator, Chair, and Associate Professor of Education**, 1979
B.S., Howard Payne College; M.Ed., Ph.D., University of North Texas

FARRIS, MARK K., **Associate Professor of Mathematics**, 1992
B.A., Ph.D., Rice University

FASHIMPAR, GARY A., **Professor of Social Work**, 1979
B.A., University of North Texas; M.S.S.W., Ph.D., University of Texas at Arlington

FAULK, JERRY D., **Chair and Associate Professor of Manufacturing Engineering Technology**, 1990
B.S., Midwestern State University; Ph.D., Texas Christian University

FISCHLI, RONALD D., **Dean of the Lamar D. Fain College of Fine Arts and Professor of Theatre**, 1990
B.S., M.S., Fort Hays Kansas State College; Ph.D., University of Missouri

FITZGERALD, MARGARET, **Assistant Professor Nursing**, 1998
B.S.N., University of Maine; M.S., University of Texas at Arlington

FLANDERS, JOANNE M., **Assistant Professor of Nursing**, 1989
B.S.N., Marian College; M.S., University of Oklahoma

FLAVIN, MICHAEL J., **Associate Professor of Political Science**, 1969
B.S., M.A., St. Louis University; Ph.D., University of Arizona

FLEMING, RICHARD G., **Chair and Associate Professor of Physics**, 1989
B.S., Midwestern State University; Ph.D., Texas Christian University

FOSNAUGH, LINDA S., **Associate Professor of Mathematics**, 1994
B.A., Centenary College of Louisiana; M.A., Ph.D., University of Nebraska

FRITZSCH, RALPH B., **Chair and Professor of Accounting**, 1984
B.S., United States Air Force Academy; M.A., Ohio State University; D.B.A., George Washington University; CPA, Arkansas

FUERTE-MANJON, ROBERTO, **Assistant Professor of Foreign Languages**, 1997
B.A., University of Salamanca (Spain); M.A., University of Northern Iowa; Ph.D., University of Georgia

FUKASAWA, YOSHIKAZU, **Dean of the College of Business Administration and Professor of Economics**, 1978
B.A., Fort Hays Kansas State University; M.A., Ph.D., Kansas State University

FULTON, CANDICE E., **Instructor in Chemistry**, 1996
B.S., Midwestern State University; M.S., University of North Texas

GALBRAITH, THOMAS W., **Chair and Associate Professor of English**, 1979
B.A., Ph.D., University of Washington

GARCIA, ADALBERTO, **Chair and Assistant Professor of Foreign Languages**, 1989
B.A., Harvard College; M.A., Ph.D., University of Texas at Austin

GIDDINGS, GREG W., **Instructor in English and Assistant Basketball Coach**, 1996
B.B.A., M.A., Midwestern State University

GLEAN, RANDY A., **Assistant Professor of Political Science**, 1997
B.A., Midwestern State University; M.A., Ph.D., Washington University

GOLDBERG, GARY, **Professor of Art**, 1983
B.F.A., Arizona State University; M.F.A., University of Nebraska

GORE, M. C., **Associate Professor of Education**, 1993
B.S.Ed., M.S.Ed., Eastern New Mexico University; Ed.D., University of Arkansas

GORHAM, JAMES, **Assistant Professor of Mass Communication**, 1998
B.A., Concordia College; M.A., University of Memphis

GREENE, PAMELA K., **Assistant Professor of Nursing**, 1996
B.S.N., M.S., Ohio State University

GREENING, SHERI, **Instructor in Business Administration**, 1998
B.S., University of Houston-Clear Lake; M.M., Northwestern University

GRIFFITHS, COLLEEN, **Assistant Professor of Education**, 1998
B.A., Hunter College; M.S., Brooklyn College; Ph.D., Ohio State University

GRIMES, JOHN V., **Professor of Biology**, 1970
B.S., M.S., Northern Illinois University; Ph.D., University of Utah

GUTHRIE, PAUL C., **Associate Professor of Psychology**, 1991
B.A., University of Texas at Dallas; M.A., Midwestern State University; Ph.D., University of Arkansas

HALVERSON, RANETTE, **Chair and Associate Professor of Computer Science**, 1980
B.S., M.S., Midwestern State University; Ph.D., University of North Texas

HARMEL, ROBERT, **Associate Professor of Economics**, 1989

B.S., Texas Tech University; M.S., Ph.D., Iowa State University

HARRIS, CAROLYN R., **Chair and Professor of Business Computer Information Systems**, 1993

B.A., Texas Tech University; M.S., University of Southern Mississippi; Ph.D., University of Texas at Arlington

HARRIS, WILLIAM T., **Bridwell Professor of Accounting**, 1993

B.B.A., M.B.A., Texas Tech University; Ph.D., Louisiana State University; CPA, Texas, CMA

HARVEY, MARTHA M., **Associate Professor of Business Administration**, 1982

B.A., Sweet Briar College; M.S., Midwestern State University; Ph.D., University of North Texas

HARVILL, MELBA S., **University Librarian and Assistant Professor**, 1967

B.A., M.A., M.L.S., Ph.D., University of North Texas

HAWLEY, LINDA J., **Coordinator of Family Nurse Practitioner Program and Assistant Professor of Nursing**, 1999

B.S., Baylor University; M.S., Texas Woman's University

HENDERSON, JOE M., **Professor of Kinesiology**, 1965

B.S.Ed., M.Ed., Texas Tech University; Ed.D., University of North Texas

HENDRICKSON, KENNETH E., JR., **Graduate Coordinator, Chair, and Professor of History - Hardin Foundation Distinguished Professor of American History**, 1970

B.A., M.A., State University of South Dakota; Ph.D., University of Oklahoma

HENSCHER, DONALD F., JR., **Professor of Speech and Theatre**, 1970

B.S., Dickinson State College; M.A., Colorado State University

HENSON, SUSAN, **Instructor in English**, 1987

B.A., Augustana College; M.A., Midwestern State University

HEWITT, HARRY P., **Professor of History**, 1967

B.S., M.A., Ph.D., University of Utah

HILBERS, JEANNIE CASH, **Director of the Small Business Development Center and Assistant Professor of Business Administration**, 1999

B.B.A., M.B.A., Midwestern State University

HINDS, WILLIAM E., **Chair and Professor of Mathematics**, 1975

B.A., University of Texas at Austin; M.A., University of Texas at Arlington; Ph.D., Oklahoma State University

HOFFMAN, THOMAS P., **Associate Professor of English**, 1968

B.S.Ed., M.A., Ball State University; Ph.D., University of Oklahoma

HOGGARD, JAMES M., **Professor of English - McMurtry Distinguished Professor of English**, 1966

B.A., Southern Methodist University; M.A., University of Kansas

HOGGARD, LYNN, **Professor of English and Foreign Languages**, 1986

B.A., Centenary College; M.A., University of Michigan; Ph.D., University of Southern California

HOLLABAUGH, LINDA L., **Associate Professor of Foreign Languages**, 1989

B.A., M.A., Ph.D., Texas Tech University

HORNER, NORMAN V., **Dean of the College of Science and Mathematics and Professor of Biology**, 1967

B.S., M.S., University of North Texas; Ph.D., Oklahoma State University

HOUGH, RONALD, **Chair and Professor of Music**, 1971

B.A., B.M., Wheaton College; M.M., Southwestern Baptist Theological Seminary; D.M.A., University of Illinois

JOHNSON, JEWETT G., **Assistant Professor of Nursing**, 1995

B.S.N., Texas Christian University; M.S., University of Michigan

JOHNSON, ROBERT L. III, **Graduate Coordinator and Professor of English**, 1992

B.A., M.A., University of Colorado; Ph.D., University of Denver

JOHNSON, STEPHEN R., **Instructor in the Intensive English Language Institute**, 1998
B.A., Jacksonville State University; M.A., University of Alabama

JONES, LINDA B., **Assistant Professor of Music**, 1999.
B.M.E., M.M., D.M.A., University of Oklahoma

KERSTEN, PAUL R., **Assistant Professor of Computer Science**, 1999
B.S., Rutgers University; M.S., Columbia University; Ph.D., Polytechnic University

KILGORE, JIMMIE L., **Assistant Professor of Kinesiology**, 1997
B.S., Lincoln University; M.S., Ph.D., Kansas State University

KILLION, JEFFREY B., **Assistant Professor of Radiologic Science**, 1999
B.S.R.S., M.S.R.S., Midwestern State University

KINDIG, EVERETT W., **Associate Professor of History**, 1971
B.A., M.A., Ph.D., Stanford University

KING, JAMES R., **Associate Professor of History**, 1968
B.A., Loras College; M.A., Ph.D., University of Iowa

KITCHEN, MICHAELLE L., **Associate Professor of Education**, 1996
B.S.O.E., Wayland Baptist University; M.Ed., University of Oklahoma; Ph.D., University of North Texas

KOCURKO, M. JOHN, **Chair and Professor of Geology-Perkins Prothro Distinguished Professor of Geology**, 1979
B.S., Midwestern State University; M.S., The University of Wisconsin-Milwaukee; Ph.D., Texas Tech University

KRIENKE, ALBERT B., **Professor of Economics**, 1965
B.S., M.S., University of Florida; Ph.D., Texas A&M University

LaBEFF, EMILY E., **Chair and Professor of Sociology**, 1978
B.A., M.A., Texas Tech University; Ph.D., Oklahoma State University

LAND, MICHAEL L., **Professor of Education-West University Professor**, 1989
B.A., Hardin-Simmons University; M.Ed., Stephen F. Austin State University; Ph.D., Texas A&M University

LATHAM, CLARA M., **Collection Development Librarian and Instructor**, 1989
B.A., Fresno State University; M.L.S., San Jose State University

LAYTON, RONALD R. II, **Instructor in Mathematics**, 1998
B.A., M.S., Texas A&M University-Commerce

LEWANDOWSKI, ELIZABETH, **Associate Professor of Theatre**, 1993
B.S., Bradley University; M.F.A., Texas Tech University

LEWIS, GARY R., **Associate Professor of Music**, 1971
B.M., Eastman School of Music; M.M., Michigan State University

LINDEMANN, DIRK, **Associate Professor of History**, 1983
B.A., University of Evansville; M.A., Ph.D., Ball State University

LOCKHART, ROBIN D., **Assistant Professor of Nursing**, 1993
A.D.N., B.S.N., Midwestern State University; M.S.N., University of Texas at Arlington

MARTIN, JAMES DAVID, **Coordinator of Applied Arts and Sciences and Professor of Political Science**, 1970
B.A., Tarkio College; M.A., Ph.D., Southern Illinois University

MARTINEZ, JOHN E., **Professor of Economics and Finance and Director of the Bureau of Business and Government Research**, 1997

B.A., University of Texas at Austin; M.S., Ph.D., University of Oklahoma

MATTHEWS, DANNY G., Assistant Professor of Accounting, 1993

B.B.A., Midwestern State University; M.S., Naval Postgraduate School; CPA, Texas, CGFM

MAXWELL, DONALD, Professor of Music, 1971

B.A., Colgate University; B.M., Friends University; M.M., D.M.E., University of Oklahoma

MAY, MARSHA A., Assistant Professor of Mathematics, 1983

B.A., Midwestern State University; M.A., University of Texas at Arlington

McBEE, ROBERT D., Associate Professor of Sociology and Director of Athletics, 1997

B.A., Presbyterian College; M.S., North Carolina A&T State University; M.S., Ph.D., University of Southern Mississippi

McCLINTOCK, STUART ALLAN, Assistant Professor of Foreign Languages, 1999

B.A., M.A., Williams College; M.A., New York University; Ph.D., Middlebury College

McCULLOUGH, CHARLES D., Professor of Marketing, 1985

B.B.A., M.B.A., Ph.D., Texas Tech University

McNEELY, THOMAS LeVAN., Instructor in the Intensive English Language Institute, 1998

B.A., M.A., Midwestern State University

MEDFORD, ANNETTE O., Assistant Professor of Respiratory Care, 1996

A.S., B.S.R.C., M.A., Midwestern State University

MENARD, TRACY, Associate Professor of Education, 1992

B.S., University of Colorado; M.Ed., Midwestern State University; Ed.D., University of Northern Colorado

MERTENS, MARILYN S., Graduate Coordinator of Public Administration and Associate Professor of Political Science, 1990

B.A., Westmar College; M.A., Ph.D., University of Nebraska, Lincoln

MEZZO, GLORIA, Assistant Professor of Nursing, 1992

B.S.N., South Dakota State University; M.S.N., University of Texas Health Science Center, San Antonio

MORRISON, GARY D., Associate Professor of Radiologic Sciences, 1988

A.A., Montgomery College; B.S.R.T., Hood College; M.Ed., University of North Texas

MORROW, RUTH E., Associate Professor of Music-Dolores P. Bolin Chair of Piano, 1989

B.A., Whitman College; M.M., M.A., Eastman School of Music; D.M., Indiana University School of Music

MUNOZ, CONSUELO, Assistant Professor of Chemistry, 1998

B.S., University of Texas Medical Branch - Galveston; M.S., Ph.D., University of Texas Health Science Center, San Antonio

NEWTON, H. GENE, Professor of Education, 1969

B.A., McMurry College; M.Ed., Ed.D., Texas Tech University

PADDACK, TED P., Instructor in Criminal Justice, 1996

B.M.E., Abilene Christian University; M.S.W., Our Lady of the Lake-San Antonio

PASSOS, NELSON L., Associate Professor of Computer Science, 1996

B.S., University of San Paulo (Brazil); M.S., University of North Dakota; Ph.D., University of Notre Dame

PATIN, ROY P., JR., Chair of Economics and Finance and Bridwell Professor of Finance, 1992

B.S., M.B.A., Louisiana State University; D.B.A., Mississippi State University

PATTERSON, JOAN, Associate University Librarian and Instructor, 1981

B.A., University of Arizona; M.A., University of Denver

PATTERSON, MIKE C., Professor of Management, 1977

B.B.A., M.B.A., Midwestern State University; Ph.D., University of North Texas

PEARSON, LINDA L., **Assistant Professor of Radiologic Sciences**, 1995
B.S.R.T., University of Oklahoma-Oklahoma City; M.Ed., University of Oklahoma-Norman

PEETZ, PAMELA A., **Instructor in Kinesiology and Head Women's Volleyball Coach**, 1999
B.S., University of Nebraska; M.S. South Dakota State University

PHIFER, JEAN SHEREE, **Assistant Professor of Radiologic Sciences**, 1995
B.S.R.T., Medical College of Georgia; M.S., Medical University of South Carolina

PIFER, NATHAN, **Instructor in Kinesiology and Head Soccer Coach**, 1990
B.A., Covenant College; M.A. Western Carolina University

PORTER, RUSSELL D., **Graduate Coordinator of Health Services Administration and Associate Professor**, 1998
B.A., Binghamton University; M.P.S., Lynn University; Ph.D., Virginia Commonwealth University

PREDA, MICHAEL A., **Professor of Political Science**, 1976
B.A., Wayne State University; M.A., Texas A&M University - Commerce; Ph.D., University of Oklahoma

PRUITT, RANDY D., **Assistant Professor of Mass Communication**, 1999
B.A., M.A., University of Oklahoma

RAMSER, CHARLES, **Chair and Professor of Management and Marketing**, 1969
B.B.A., University of Texas at Arlington; M.B.A., University of Texas at Austin; Ph.D., University of North Texas

RAY, JEFFERY W., **Instructor in Kinesiology and Head Men's Basketball Coach**, 1988
B.S., M.S.P.E., Midwestern State University

RHOADS, JOHN EVERETT, **Assistant Professor of Physics**, 1999
B.S., Midwestern State University; M.S., Ph.D., Oklahoma State University

RINCÓN-ZACHARY, ELIZABETH M., **Graduate Coordinator and Assistant Professor in Biology**, 1992
B.S., Pedagogic of Caracas, Venezuela; M.S., Ph.D., University of Illinois at Urbana

RODRIGUEZ, LOUIS J., **President and Professor of Economics**, 1981
B.A., Newark Colleges of Rutgers University; M.A., Ph.D., Louisiana State University

ROGERS, JESSE W., **Vice President for Academic Affairs and Professor of Chemistry**, 1967
B.S., University of Texas at Arlington; Ph.D., Texas Christian University

ROGERS, KAREN K., **Assistant Professor of English**, 1980
B.S.E., M.E., M.A., Midwestern State University; Ph.D., University of Texas at Dallas

SAMUELSON, RYAN L., **Government Publications Librarian and Instructor**, 1999
B.A., University of Texas at Dallas; M.S., University of North Texas

SANDFORD, SONIA, **Assistant Professor of Kinesiology**, 1998
B.A., M.A., University of Northern Colorado; Ed.D., Texas A&M University

SCHMITTER, JOEL S., **Associate Professor of Mathematics**, 1993
B.A., M.S., Ph.D., University of Wisconsin

SCHRAM, DEANNE P., **Instructor in Business Administration and Academic Adviser**, 1997
B.B.A., M.B.A., Midwestern State University; CPA, Texas

SERNOE, JAMES L., **Assistant Professor of Mass Communication**, 1995
B.A., M.A., University of Wisconsin

SHOWALTER, VALERIE, **Chair and Assistant Professor of Radiologic Sciences**, 1990
A.S., Howard College; B.S.R.T., Midwestern State University; M.S., University of Texas at Tyler

SIMPSON, RICHARD P., **Assistant Professor of Computer Science**, 1980
B.S., M.A., Sam Houston State University

SLAVENS, DAWN RENEE, **Assistant Professor of Mathematics**, 1999
B.S., Emporia State University; M.S., Stephen F. Austin State University; Ph.D. University of North Texas

SMITH, ANN L., **Coordinator of Graduate Nurse Educator Program and Associate Professor of Nursing**, 1995
B.S.N., M.S.N., University of Hawaii-Manoa; Ph.D. Texas Woman's University

SMITH, EVANS LANSING, **Professor of English**, 1990
B.A., Williams College; M.A., Antioch International; Ph.D., Claremont Graduate School

SNOW, FRANCIS M., **Instructor in Mathematics**, 1997
B.S., Springfield College; M.S., George Mason University

SNOWDEN, STEVEN R., **Graduate Coordinator, Chair, and Associate Professor of Kinesiology**, 1997
B.S., Texas A&M University; M.A., Sam Houston State University; Ph.D., Texas A&M University

SPILLER, DIANE M., **Coordinator of Academic Support Center and Assistant Professor of Mathematics**, 1989
B.S., Texas Tech University; M.Ed., University of Houston

SPORTSMAN, SUSAN S., **Dean of the College of Health Sciences and Professor of Nursing**, 1996
B.S., Baylor University; M.S., M.S.N., University of Texas at Arlington; Ph.D., Texas Woman's University

STANGL, FREDERICK B., JR., **Professor of Biology**, 1984
B.S., M.S., Midwestern State University; Ph.D., Texas Tech University

STEWART, ALFRED D., JR., **Associate Professor of English and Philosophy**, 1973
B.A., M.A., M.A., University of Oklahoma; Ph.D., University of North Carolina

STEWART, DIANE, **Assistant Professor of Nursing**, 1998
B.S.N., Midwestern State University; M.S.N., University of Texas at Arlington

STILES, BEVERLY L., **Assistant Professor of Sociology**, 1999
B.A., Midwestern State University; M.A., Baylor University

SUTKO, ADOLPH A., **Professor of Manufacturing Engineering Technology**, 1987
B.S., M.S., Ph.D., University of Nebraska

TAYLOR, ARVILLA K., **Associate Professor of English**, 1969
B.A., M.A., Ph.D., University of Texas at Austin

TICKLE, EUGENIA, **Associate Professor of Nursing**, 1989
B.S.N., Oklahoma Baptist University; M.S.N., University of Arizona; Ed.D., University of North Texas

TILKER, KRISTOPHER R., **Associate Professor of Business Administration**, 1989
B.A., Midwestern State University; J.D., Texas Tech University

TUCKER, DAVID S., **Associate Professor of Mathematics**, 1988
A.B., Kansas State University; M.S., Michigan State University; Ph.D., Florida State University

VANDEHEY, MICHAEL A., **Assistant Professor of Psychology**, 1999
B.A., University of Oregon; M.S., Ph.D., Indiana State University

VAN GEEM, HENRY, **Graduate Coordinator and Associate Professor of Finance**, 1964
B.B.A., Midwestern State University; M.B.A., University of North Texas; Ph.D., Texas Tech University

VEALÉ, BETH, **Assistant Professor of Radiologic Sciences**, 1990
A.S., New Mexico State University; B.S.R.S., Midwestern State University; M.Ed., University of North Texas

VOEGEL, PHILLIP, **Chair of Environmental Science and Assistant Professor of Chemistry**, 1998

B.A., Wabash College; Ph.D., University of Louisville

WALKER, JAN, Chair and Assistant Professor of Social Work, 1995

B.A., M.S.S.W., University of Texas at Arlington; Ph.D., Texas Woman's University

WALKER, STEVEN J., Assistant Professor of Management and Marketing, 1997

B.B.A., M.B.A., Ph.D., New Mexico State University

WARNDORF, JOSEPH, Associate Professor of Mathematics, 1969

B.S., Arkansas Polytechnic College; M.A., University of North Texas

WATKINS, JACKIE L., Professor of Geology, 1958

B.S., M.S., Southern Methodist University; Ph.D., University of Michigan

WATSON, SAMUEL E., III, Chair and Associate Professor of Political Science, 1992

A.B., University of Georgia; M.A.L.D., Fletcher School of Law & Diplomacy; Ph.D., University of Georgia

WELCH, ROBERT G., Professor of Economics, 1966

B.S., M.S., University of Wyoming; Ph.D., Oregon State University

WHALEY, KERMIT C., Professor of Radiologic Sciences, 1996

B.A., University of North Carolina; M.E., Ed.D., North Carolina State University

WHITE, WILLIAM L., Director of International Programs and Instructor in the Intensive English Language Institute, 1994

B.A., University of Virginia; M.A., West Virginia University

WIEST, SHELLEY, Professor of Music, 1988

B.S., Kansas State University; M.M., Baylor University; M.P., Ph.D., University of Kansas

WIGGINS, LARRY W., Instructor in Kinesiology and Tennis Coach, 1997

B.A., Tarleton State University; M.A., University of New Mexico

WILLIAMS, ANDREA L., Curriculum Materials Librarian and Instructor, 1989

B.A., M.A., Midwestern State University; M.L.S., Texas Woman's University

WILLIAMS, DAVID L., Assistant Professor of Economics and Finance, 1999

B.B.A., McMurry University; M.A., Texas Tech University

WILLIAMS, LARRY E., Professor of Sociology, 1976

B.S., M.S., East Texas State University; Ph.D., Brigham Young University

WILLIAMS, RICKEY, Professor of Chemistry, 1970

B.A., Ph.D., Texas Christian University

WILSON, LAURA, Chair and Associate Professor of Theatre, 1984

B.A., Midwestern State University; M.F.A., Southern Illinois University

YAROSZ, ELIZABETH A., Professor of Art, 1981

B.A., Lycoming College; M.F.A., Ohio University

EMERITI FACULTY AND ADMINISTRATION

ALLEN, JAMES L., B.A., M.A., Assistant Professor of Journalism, 1967-1986.

ALLEY, R.C., Director of the Physical Plant, 1955-1986.

BACKHAUS, FRED J., L.L.B., L.L.D., Associate Professor of Political Science, 1967-1992.

BOLAND, IVY EDDLEMON, B.M., M.M., Professor of Music, 1946-1981.

BOLAND, WILLIAM V., B.F.A., B.M., M.M., **Professor of Music**, 1949-1978.

BOUTWELL, ROY K., B.B.A., M.B.A., Ed.D., **Instructor in Business Administration**, 1969-1997.

BRACKEEN, BILLY C., B.S., M.Ed., **Coordinator of Engineering Technology Program and Assistant Professor of Engineering Drawing**, 1959-1990.

BROWN, HARRY M., Th.B., B.A., M.A., Ph.D., **Professor of English**, 1966-1994.

BULLOCK, BETTY, B.A., M.A., **Registrar**, 1956-1987.

CAMPBELL, JEFFERSON H., B.A., B.D., Ph.D., **Graduate Coordinator and Professor of English**, 1974-1999.

COVERT, JOHNNIE, B.A., M.A., **Instructor in Political Science**, 1987-1997.

COWART, GWENDOLYN, B.S.E., M.E., M.S., **Coordinator and Assistant Professor of Speech and Language Therapy**, 1973-1986.

CROSSNOE, THOMAS, B.A., M.A., **Professor of Art**, 1966-1989.

DALQUEST, WALTER W., B.S., M.S., Ph.D., **Professor of Biology**, 1952-1984.

DARTER, CLARENCE L., JR., B.S., M.Ed., Ed.D., **Coordinator of Physical Education and Professor of Education**, 1966-1997.

DICKERSON, ELBERT L., B.A., M.Ed., Ed.D., **Professor of Education and Dean of Graduate Studies**, 1958-1983.

DOMI, DOUGLAS, R.T., B.S.R.T., M.Ed., **Assistant Professor of Radiologic Technology**, 1976-1996.

EVANS, H. G., B.A.A.S., **Director of Campus Police**, 1972-1999.

FURR, ONETA ROBERTS, B.S., M.S., Ed.D., **Professor of Education**, 1950-1979.

FLATT, DONALD, B.S., M.Ed, Ed.D., **Professor of Physical Education**, 1963-1998.

GARCIA, GUILLERMO, B.A., M.A., Ph.D., **Associate Professor of Foreign Languages**, 1965-1989.

GILLESPIE, SHERRY, B.S., M.S., Ph.D., **Associate Professor of Physical Education**, 1967-1997.

GRADY, VIOLA, B.S., M.S., **Dean of Students**, 1958-1984.

HILL, THOMAS BARLOW, B.S., M.Ed., Ed.D., **Professor and Director of the Division of Education**, 1964-1988.

HOLVERSON, EDWIN L., B.A., M.S., Ph.D., **Coordinator and Professor of Physics**, 1967-1999.

HUFFMAN, LOUIE C., B.S., M.Ed., M.A., Ph.D., **Professor of Mathematics**, 1955-1990.

HUGHES, KENT E., B.M., M.M., D.M.A., **Professor of Music**, 1953-1992.

INMAN, CHARLENE, B.S., B.S.N., M.E., M.S.N., Ed.D., **Associate Professor of Nursing and Director of the Division of Health Sciences**, 1979-1986.

KABLE, JUNE E., B.M., M.E., Ed.D., **Director of the Division of Fine Arts and Professor of Speech Communication**, 1967-1992.

KLEIN, RUDOLF M., B.S., Ph.D., **Associate Professor of Foreign Languages**, 1968-1995.

MADERA, ROBERT, B.S., B.A., M.A., D.B.A., **Professor of Accounting**, 1951-1988.

MARTIN, WALT, B.B.A., M.B.A., **Director of Personnel**, 1966-1987.

McINTURFF, JAMES D., B.A., M.B.A., CPA, **Assistant Professor of Accounting**, 1988-1999

McWHORTER, GENEVA, B.S., M.E., **Assistant Professor of Office Administration**, 1964-1986.

MEUX, JOHN W., B.S., M.S., Ph.D., **Professor of Mathematics**, 1964-1993.

MOELLER, WARREN L., B.S., M.B.A., **Associate Professor of Business Administration**, 1963-1991

NEIGHBOURS, KENNETH, B.A., M.A., Ph.D., **Professor of History**, 1955-1981.

PRESTON, CHARLES L., **Director of the Physical Plant**, 1967-1990.

ROUNTREE, DANIEL W., B.A., M.A., Ph.D., **Professor of Marketing**, 1990-1997.

SABOTA, LEO M., B.A., M.A., Ph.D., **Professor of Political Science**, 1969-1990.

SCOTT, NANCY A., B.A., M.S., **Assistant Professor of Biology**, 1963-1996.

SIMS, RAYMOND, B.S., M. Engr. Phys., **Assistant Professor of Physics**, 1963-1993.

SMITH, LEE A., B.S., M.Ed., Ed.D., **Professor of Education**, 1965-1988.

STEWART, JAMES, B.A., M.S., **Vice President for Administration**, 1963-1989.

STOCKTON, GERALD, E., B.S., M.S., Ph.D., **Associate Professor of Physical Education and Head Men's Basketball Coach**, 1970-1994.

SUND, ELDON H., B.S., Ph.D., **Professor of Chemistry**, 1967-1995.

TITTLE, R. CHARLES, B.B.A., M.B.A., C.P.A., **Associate Professor of Accounting**, 1968-1991.

VOLK, MARY E., B.A., M.A., Certificat d'Etudes Francaises, **Assistant Professor of Foreign Languages**, 1967-1987.

WHITLOCK, BAIRD W., B.A., Ph.D., D.Litt., **Professor of English**, 1978-1989.

ZEMBROD, ANTON, B.S.R.T., M.Ed., **Assistant Professor of Radiologic Technology**, 1972-1989.

HARDIN PROFESSORS

Beginning with the academic year 1961-62, the Hardin Foundation for Wichita County established an annual award for a member of the Midwestern State University faculty whose teaching and research of the preceding twelve months had brought distinction to the faculty member and the institution. The award is currently \$3,500.

WALTER W. DALQUEST	1961-1962
FLOYD F. EWING	1962-1963
CICERO H. BERNARD	1963-1964
WALTER L. WEHNER	1964-1965
JOSEPH SATIN	1965-1966
JOHN W. MEUX	1966-1967
JOSEPH E. ROSE	1967-1968
E. KENT HUGHES	1968-1969
F. ROBERT MADERA	1969-1970
NEIL B. HOLLIMAN	1970-1971
JESSE W. ROGERS	1971-1972
T. BARLOW HILL	1972-1973
K. E. HENDRICKSON, JR.	1973-1974
ELDON H. SUND	1974-1975
NORMAN V. HORNER	1975-1976
JAMES M. HOGGARD	1976-1977
RICKEY J. WILLIAMS	1977-1978
RICHARD M. ASH, III	1978-1979
ROBERT D. BECKER	1979-1980
JEFFERSON H. CAMPBELL	1980-1981
ROBERT E. CLARK	1981-1982
BAIRD W. WHITLOCK	1982-1983
YOSHI FUKASAWA	1983-1984
RODNEY LEE CATE	1984-1985
EMILY E. LABEFF	1985-1986
R. STEVEN TIPPS	1986-1987
DONALD F. HENSCHER, JR.	1987-1988
CHARLES D. MCCULLOUGH	1988-1989
FREDERICK STANGL, JR.	1989-1990
ELIZABETH A. YAROSZ	1990-1991
GEORGE M. DIEKHOFF	1991-1992
HARRY P. HEWITT	1992-1993
HARRY M. BROWN and	1993-1994
LOUIS J. RODRIGUEZ	
MICHAEL L. LAND	1994-1995
RUTH E. MORROW	1995-1996
LYNN HOGGARD	1996-1997
RANETTE HALVERSON	1997-1998
MARTHA HARVEY	1998-1999

HARDIN SCHOLARS

Likewise in 1961-62 the Hardin Foundation established an annual award of \$1,500 (currently \$2,500) for a student whose scholastic achievements and participation in University activities during the preceding year had brought distinction to the student and Midwestern State University.

JOHNNY WALBRICK	1961-1962
JANICE ELAINE LAIDLEY	1962-1963
HARVEY MARTZ	1963-1964
FRANCES DARLENE REIMERS	1964-1965
JUDY WATTS	1965-1966
JOHN EVERETT RHOADS	1966-1967
KENNETH SIBER	1967-1968
LINDAL NEWBY	1968-1969
PEGGY SPRING	1969-1970
DAVID M. JONES and STEPHEN K. MOOREHEAD	1970-1971
JEANNA BETH MOORE	1971-1972
JOSEPH S. HOOD, JR. and REBECCA HAWKINS POND	1972-1973
DONNA GRIMSLEY EARP	1973-1974
JOHN T. HEATH	1974-1975
CHARLOTTE ANN WEBB	1975-1976
MICHAEL S. FINDLEY	1976-1977
SHARON KAY LIPPE	1977-1978
DARYL LIN LEICK	1978-1979
JERRY DEAN MCGEE	1979-1980
AJAI CADAMBI and VICTOR M. BOYER	1980-1981
MATTHEW R. MUTH	1981-1982
KAY LYNN BAUMAN	1982-1983
JOHN M. YOUNG	1983-1984
LYDIA BARTON	1984-1985
GREGORY POGUE	1985-1986
PETER D. KOPLYAY and ALISHA HAIGOOD	1986-1987
WILLIAM JAMES EARNEST	1987-1988
RICHARD KEITH HUGHLETT	1988-1989
ALANNA ALBRECHT	1989-1990
PHILLIP EDWARD CHAPA	1990-1991
STACIE BEAUCHAMP and JENNY SALAN	1991-1992
MELISSA METIVIER	1992-1993
JENNIFER JEN'NAN GHAZAL	1993-1994
CORBY B. WALKER	1994-1995
CODY RAY COLE	1995-1996
LEILA ANNE PLUMMER	1996-1997
DEBBIE LOU JONES BYRNE	1997-1998
ROBERT PRESTON LIGHT	1998-1999
DANIKA NIKOLE TAYLOR	1999-2000

FACULTY AWARD

The Faculty Award is an award given by the faculty of Midwestern State University to a full-time faculty member for teaching excellence and service to the University.

1977	Arthur F. Beyer
1978	Harlan J. Steph
1979	Robert E. Clark
1980	F. Robert Madera
1981	Billy C. Brackeen
1982	O. Emerson Capps
1983	Norman V. Horner
1984	William E. Hinds
1985	Emily E. LaBeff
1986	Nancy A. Scott
1987	John W. Meux
1988	Michael J. Flavin
1989	Sherry Gillespie
1990	Donald Maxwell
1991	Charles D. Ramser
1992	Ranette Halverson
1993	Frederick B. Stangl, Jr.
1994	Jefferson H. Campbell
1995	Robert G. Welch
1996	Richard P. Simpson
1997	Diane M. Spiller
1998	Martha Harvey
1999	John V. Grimes
2000	Henry Van Geem

COMMON COURSE NUMBERS

COMMON COURSE NUMBERS

To facilitate the transfer of courses, Midwestern State University participates with other Texas schools in designating the common course number for the following courses:

COMMON COURSE NO.	MSU COURSE NO.	COMMON COURSE NO.	MSU COURSE NO.
ACCT 2301	ACCT 2143	ENGL 2332	ENGL 2413
ACCT 2302	ACCT 2243	ENGL 2333	ENGL 2423
ARTS 1301	ART 1413	FREN 1411	FREN 1134
ARTS 1311	ART 1113	FREN 1412	FREN 1234
ARTS 1312	ART 1123	FREN 2311	FREN 2133
ARTS 1316	ART 1313	FREN 2312	FREN 2233
ARTS 1317	ART 1323	GEOL 1304	GEOL 1233
ARTS 2316	ART 2313	GEOL 1403	GEOL 1134
ARTS 2317	ART 2323	GERM 1411	GERM 1134
ARTS 2323	ART 2213	GERM 1412	GERM 1234
ARTS 2326	ART 2523	GERM 2311	GERM 2133
ARTS 2327	ART 2823	GERM 2312	GERM 2233
ARTS 2333	ART 2153	GOVT 2301	POLS 1333
ARTS 2346	ART 2613	GOVT 2302	POLS 1433
ARTS 2347	ART 2623	HIST 1301	HIST 1133
ARTS 2356	ART 2013	HIST 1302	HIST 1233
BCIS 1301	BCIS 2153	HIST 2311	HIST 1333
BIOL 1322	BIOL 2333	HIST 2312	HIST 1433
BIOL 1411	BIOL 1544	MATH 1314	MATH 1233
BIOL 1413	BIOL 1144	MATH 1316	MATH 1433
BIOL 2401	BIOL 1134	MATH 2413	MATH 1634
BIOL 2402	BIOL 1234	MATH 2414	MATH 1734
BUSI 1301	BUAD 1033	MATH 2415	MATH 2534
BUSI 1307	FINC 1733	MUSI 1157	MUSC 1931
CHEM 1105	CHEM 1101	MUSI 1306	MUSC 1033
CHEM 1111	CHEM 1141	MUSI 1310	MUSC 1033
CHEM 1112	CHEM 1241	MUSI 1311	MUSC 1603
CHEM 1305	CHEM 1103	MUSI 1312	MUSC 1613
CHEM 1307	CHEM 1203	MUSI 2311	MUSC 2603
CHEM 1311	CHEM 1143	MUSI 2312	MUSC 2613
CHEM 1312	CHEM 1243	PHED 1164	KNES 1011
COMM 1307	JOUR 1233	PHED 1301	KNES 1053
COSC 1300	CMPS 1023	PHED 1304	KNES 1203
CRIJ 1301	CRJU 1113	PHED 1306	KNES 2213
CRIJ 2313	CRJU 2243	PHED 1308	KNES 2353
CRIJ 2314	CRJU 2913	PHIL 1301	PHIL 1033
CRIJ 2323	CRJU 2213	PHIL 1316	BIBL 1133
CRIJ 2328	CRJU 2233	PHIL 1317	BIBL 1233
DRAM 1120	THEA 2121	PHIL 2303	PHIL 1533
DRAM 1310	THEA 1503	PHIL 2306	PHIL 2033
DRAM 1322	THEA 1413	PHIL 2316	PHIL 2233
DRAM 1330	THEA 1513	PHYS 1401	PHYS 1144
DRAM 1341	THEA 1613	PHYS 1402	PHYS 1244
DRAM 1351	THEA 2533	PSYC 2301	PSYC 1103
DRAM 2336	SPCH 1233	SOCL 1301	SOCL 1133
ECON 1301	ECON 1333	SOCL 1306	SOCL 2233
ECON 2301	ECON 2333	SPAN 1411	SPAN 1134
ECON 2302	ECON 2433	SPAN 1412	SPAN 1234
ENGL 1301	ENGL 1113	SPAN 2311	SPAN 2133
ENGL 1302	ENGL 1123	SPAN 2312	SPAN 2233
ENGL 2322	ENGL 2813	SPCH 1315	SPCH 1133
ENGL 2323	ENGL 2823	SPCH 1342	SPCH 1233
ENGL 2327	ENGL 2613	SPCH 2341	SPCH 2133

INDEX

Index
Map
Information Request Form

INDEX

A

Absences, Authorized,
Academic Calendar,
Academic Dishonesty,
Academic Foundations and Core Curriculum,
Academic Fresh Start Elective,
Academic Organization,
Academic Standards,
Academic Support Center,
Academic Suspension and Dismissal,
Accounting,
Accreditation and Membership, University,
Activity Courses,
Administration, Emeriti,
Administration, University,
Admission Application,
Admission Information,
 Degree Candidacy,
 Graduate Studies,
 Special Academic Programs,
Advanced Placement Program,
Advisers, Faculty,
Alumni Relations Office,
American College Test (ACT),
Anti-Discrimination Statement,
Applicability of Catalog Regulations,
Application for Degree Candidacy,
Application Request Form,
Applied Arts and Sciences, Bachelor of,
Applied Music,
 Fees,
Art,
Athletic Trainer Emphasis,
Athletics,
Attendance,
Audit Fee,
 of Courses,
Automobile Registration,
Aviation Management,

B

Bachelor Degrees (See Degrees)
Benefits of Veterans,
Biblical History and Literature,
Biological Science,
Board of Regents,
Bridwell Professorship of Accounting,
Bridwell Professorship of Finance,
Buildings and Grounds,
Bureau of Business and Government Research,
Business Administration, College of,
Business Computer Information Systems,
Business, Teaching Field,

C

Calendar,
Career and Testing Services,
Catalog Expiration,
Change of Address,
Change of Schedule,
Chemical Technology,

Chemistry,
Clark Student Center,
Class Attendance,
Classification of Students,
College Level Exam Program (CLEP),
Colleges
 Business Administration,
 Education,
 Fine Arts,
 Health Sciences,
 Liberal Arts
 Science and Mathematics,
Commencement,
Common Course Numbers,
Computer Science,
Concurrent Enrollment,
Continuing Education,
Core Requirements,
Correspondence Work,
Cost of Attending,
Counseling,
Course, Dropping,
 Fees,
 Load,
 Numbers,
Credit by Examination,
Criminal Justice,
Cultural Opportunities,

D

Dean of Students,
Defense Activity for Non-Traditional Education Support (DANTES),
Degrees, General Information,
 Plan,
 Bachelor of
 Applied Arts and Sciences,
 Arts,
 Business Administration,
 Fine Arts,
 Music,
 Science,
 in Criminal Justice,
 in Dental Hygiene,
 in Interdisciplinary Studies,
 in Medical Technology,
 in Nursing,
 in Radiological Science,
 in Respiratory Care,
 Social Work,
 Second Bachelor's Degree,
 Graduate,
Dental Hygiene,
Deposit, Room,
Disabled, Services for,
Dismissal, Academic,
Distance Learning,
Dolores P. Bolin Chair of Piano,
Dropping a Course,

E

Early High School Graduates - Scholarship,
Economics,

Education,
All Level, Certification,
Art,
Business,
Kinesiology,
Music,
College of,
Courses,
Elementary,
Endorsements,
Integrated Teaching Fields,
Kindergarten,
Provisional Certificate,
Special Education,
Teacher Certification,
Teaching Fields,
Emeriti Faculty and Administration
Employment, Student,
Enforced Withdrawal,
Engineering Drawing,
English,
English Usage Test,
Enrollment and Faculty Statistics,
Entrance Requirements,
Environmental Science,
Estimate of Annual Cost,
Evening Programs,
Exemptions from Registration Fees,
Expenses,
Experiential Learning,
Expiration of Catalog,
Ex-Students Association,

F

Faculty, University,
Award,
Emeriti,
Statistics,
Family Educational Rights and Privacy Act of 1974,
Fees,
Description of,
Graduation,
Room and Board,
Fee Payment,
Fine Arts, College of,
Finance,
Financial Aid,
Foreign Language,
Fraternities,
French,
Fresh Start,
Full-time Student,

G

General Business,
General Information,
General Requirements for all Bachelor's Degrees,
Geography,
Geology,
German,
Goals of Academic Foundation,
Gordon T. and Ellen West College of Education,

Grade Point Average,
Grade Point Deficiency,
Grading System and Grade Reports,
Graduate Studies,
Graduation Fee,
Graduation With Honors,
Grants,
Greek Organizations,

H

Hardin

Foundation Distinguished Professor of American History,
Professors,
Scholars,
Hazlewood Act,
Health Data Report,
Health Fitness Management,
Health Sciences, College of,
Health Center, Vinson,
High School Concurrent,
History,
History, University,
Home School,
Honor Graduate,
Honor Rolls,
Honors Graduation,
Honors Program,
Honorary Societies,
Housing,
Human Dignity Statement,
Humanities,

I

Incomplete Grade,
Individual Approval for Admission,
Instructor Drop,
Insurance, Student,
Intensive English Language Institute,
Interactive Television,
Intercollegiate Athletics,
Interdisciplinary Studies,
International Baccalaureate Program,
International Students,
International Studies,
International Trade,
Intramural Activities,

J

Journalism,

K

Kinesiology,

L

Lamar D. Fain College of Fine Arts,
Larry McMurtry Center for the Arts and Humanities,
Law Enforcement (See Criminal Justice),
Liberal Arts, College of,
Library, Moffett,
Licensed Athletic Trainer Emphasis,
Load, Student,

Loans,
Location of University,
Lower Division Courses,

M

Mamie Raborn Center for Economic Education,
Management,
Manufacturing Engineering Technology,
Map of University,
Marketing,
Mass Communication,
Master's Degrees,
Mathematics,
McMurtry Center for the Arts and Humanities,
McMurtry Center Summer Workshops,
McMurtry Distinguished Professor of English,
Meals,
Medical Technology,
Military Service,
Mission,
Moffett Library,
Music,
 Applied,
 Education, Music,
 Ensemble,
 Entrance Requirements,
 Performance,
 Recital Requirements,
 Undergraduate Degrees,

N

Non-Resident Status,
Non-Traditional Credit,
Nursing,

O

Objectives, University,
Officers of University,
Oklahoma Tuition,
Organization, Academic,
Organization, Student,
 Governing Councils,
 Greek,
 Religious,
 Scholastic and Honorary,
 Service,
 Special Interest,
 Sports,
 University Committees,

P

Part-time Employment,
Part-time Student,
Payments Schedule,
Personal Identification Number (PIN),
Philosophy Program,
Philosophy/Objectives, University,
Physical Education (See Kinesiology),
Physical Activities Exception,
Physics,
Placement Service,
Political Science,

Pre-Professional,
Prerequisite,
Privacy Act,
Probation, Scholastic,
Problem Courses,
Proficiency Examinations,
Programs

Accounting,
Applied Arts and Sciences,
Art,
Biology,
Business Computer Information Systems,
Chemical Technology,
Chemistry,
Computer Science,
Criminal Justice,
Dental Hygiene,
Economics,
Education,
English,
Environmental Science,
Finance,
General Business,
Geology,
Health Fitness Management,
History,
Humanities,
International Studies,
International Trade,
Kinesiology,
Management,
Marketing,
Mass Communication,
Manufacturing Engineering Technology,
Mathematics,
Medical Technology,
Music,
Nursing,
Physical Education (see Kinesiology),
Physics,
Political Science,
Psychology,
Radiologic Sciences,
Respiratory Care,
Social Work,
Sociology,
Spanish,
Theatre,

Prothro Professorship of Geological Sciences,
Psychology,
Public Information, Office of,
Public Relations,
Publications, University,
Purpose,

R

Radiologic Sciences,
Refund Schedule,
Pro-Rata Refunds,
Registration, Auto,
Registration, Fees,
Exemption of Fees,

Permit,
Religious Organizations,
Repetition of Courses,
Reports, Grade,
Residence Policy,
Resident Status,
Residual ACT,
Respiratory Care,
Room and Board,

S

Schedule Change,
Scholarships,
Scholastic Aptitude Test (SAT),
Scholastic Probation,
Science and Mathematics, College of,
Second Bachelor's Degree,
Semester Hour,
Service Organizations,
Services for Disabled,
Small Business Development Center,
Social Work,
Sociology,
Sororities,
Spanish,
Special Academic Programs,
Special Education,
Spectrum Program,
Speech Communication,
Sports,
Statistics,
Student Activities,
 Government,
 Organizations,
Student
 Alert,
 Class Load,
 Development Programs,
 Employment,
 Insurance,
 Right to Know and Campus Security Act,
 Rights,
 Services,
Summer Terms,
Suspension, Academic,

T

TASP,
Teacher Certification,
 All-Level Programs,
 Requirements,
Teacher Education, (See Education)
Telecourses,
Tests,
 American College Test (ACT),
 Scholastic Aptitude Test (SAT),
 Texas Academic Skills Program (TASP),
Testing Service,
Theatre,
Time Limit of Catalog,
Transcript Services,
Transfer Students,

TTVN,
Tuition (See Registration Fees),
Exemptions,
Limit,
Rebate,

U

Undergraduate Degrees,
Universities Center at Dallas,
University
Honor Rolls,
Housing,
Information,
Philosophy and Objectives,
University Map,
Upper Division Courses,
Upward Bound,

V

Veterans,
Vinson Health Center,
Vocational-Technical Credit,

W

Web-Based Courses,
West Center for Teaching Excellence,
West College of Education,
West Foundation Professorships of Education,
Withdrawal from University,

(Map)

MIDWESTERN STATE UNIVERSITY

INFORMATION REQUEST FORM

Prospective students are encouraged to contact the Office of School Relations. An application package will be sent to you by completing this form. If you desire a visit to the MSU campus, contact our office to schedule your personal tour of Midwestern State. Our office hours are 8:00 a.m. to 5:00 p.m. Monday-Friday, excluding the holiday periods.

Name _____ SSN _____

Address _____

City _____ State _____ Zip _____

Telephone _____

Intended Major _____

Other Interests _____

School Now Attending _____

What year/semester do you plan to start at MSU? _____

Current Classification: High School FR SO JR SR

College Transfer Junior College Transfer

Senior College Transfer

Other requests: _____

Please return this form to:

Office of School Relations
Midwestern State University
3410 Taft Boulevard
Wichita Falls, TX 76308-2099
Local: (940) 397-4334
Toll-free: 1-800-842-1922
E-mail: school.relations@nexus.mwsu.edu

Midwestern State University's home page: <http://www.mwsu.edu>

NOTES