Academic Departments and Programs
INTRODUCTION

The mechanical engineering program at CSUF provides a foundation for professional engineering careers in private industry and government. Mechanical engineers are employed in a wide range of industries, such as manufacturing, transportation, energy, food, biomedical and others. In general, mechanical engineers are involved with the design, research, development, manufacture, testing, distribution, support, maintenance and recycling of devices and products. Automobiles, airplanes, home appliances, robots, rockets, space capsules, printers and computer hard disk drives are some of the various products that have been customarily designed and developed by mechanical engineers. Mechanical engineers possess a firm understanding of science, mathematics and engineering needed to carry out these complex tasks which are so important to a modern technological society.

The Bachelor of Science in Mechanical Engineering is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700.

The graduate curriculum is designed to provide a specialized education for career advancement or further work towards a doctoral degree.

LEARNING GOALS AND STUDENT LEARNING OUTCOMES

The following learning goals and outcomes have been established for students pursuing a degree in Mechanical Engineering:

Program Educational Objectives

A. Technical Growth – Graduates will be successful in modern engineering practice, integrate into the local and global workforce, and contribute to the economy of California and the nation

B. Professional Skills – Graduates will continue to demonstrate the professional skills necessary to be competent employees, assume leadership roles, and have career success and satisfaction

C. Professional Attitude and Citizenship – Graduates will become productive citizens with high ethical and professional standards, who make sound engineering or managerial decisions, and have enthusiasm for the profession and professional growth

Program Outcomes

(a) An ability to apply knowledge of mathematics, science, and engineering

(b) An ability to design and conduct experiments, as well as to analyze and interpret data

(c) An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability

(d) An ability to function on multi-disciplinary teams
(e) An ability to identify, formulate, and solve engineering problems
(f) An understanding of professional and ethical responsibility
(g) An ability to communicate effectively
(h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context
(i) A recognition of the need for and an ability to engage in life-long learning
(j) A knowledge of contemporary issues
(k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

2 + 2 Articulated Programs with Community Colleges

The Mechanical Engineering Department has developed 2+2 articulation agreements with community colleges to provide students seamless transfer to CSUF’s Mechanical Engineering program. This allows the full-time students taking the courses specified by the department adviser to graduate in two years following transfer to CSUF.

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING (134 UNITS)

The requirements for the degree comprise four major segments: foundation courses in mathematics and physical sciences; basic engineering courses; general education courses in the arts, humanities, social sciences, biological sciences and other related areas; and a sequence of courses to fulfill the requirements of the Mechanical Engineering degree or the emphasis in Manufacturing Engineering.

Students are required to meet with their academic adviser every semester during the first year and at least once a year thereafter. Students are strongly encouraged to see their academic advisers frequently to obtain guidance in pursuit of their careers. All courses taken in fulfillment of the requirements for the bachelor's degree must be taken for a letter grade, i.e., under grade Option 1. All mathematics and physical science courses required for the degree must be completed with at least a “C” (2.0) to count as prerequisite courses to engineering courses or as credit towards the degree. Graduate courses are not open to undergraduate students without approval of the program coordinator.

Mathematics and Science Courses (30)

MATH 150A Calculus (4)
MATH 150B Calculus (4)
MATH 250A Multivariate Calculus (4)
MATH 250B Introduction to Linear Algebra and Differential Equations (4)
CHEM 120A General Chemistry (5)
PHYS 225, 225L Fundamental Physics: Mechanics and Lab (4)
PHYS 226, 226L Fundamental Physics: Electricity and Magnetism and Lab (4)

PHYS 227 Fundamental Physics: Waves, Optics and Modern Physics (1)

Engineering Core Courses (24)

EGME 102 Graphical Communications (3)
EGCE 201 Statics (3)
EGEE 203 Electric Circuits (3)
EGME 205 Digital Computation (3)
EGCE 302 Dynamics (3)
EGME 304 Thermodynamics (3)
EGME 306A Unified Laboratory (1)
EGME 308 Engineering Analysis (3)
EGME 314 Engineering Economy (2)

General Education Courses

Area A: Core Competencies (9 Units)
1. Oral Communication (3)
   HONR 101B, HCOM 100, 102
2. Written Communication (3)
   ENGL 101
3. Critical Thinking (3)
   HONR 101A, HCOM 235, PHIL 105, 106, PSYC 110, READ 290

Area B: Scientific Inquiry and Quantitative Reasoning (16 Units)
1. Physical Science (8)
   CHEM 120A and PHYS 225
2. Life Science (3)
   BIOL 101
3. Laboratory Experience (1)
   PHYS 225L
4. Mathematics/Quantitative Reasoning (4)
   MATH 150A
5. Implications and Explorations in Mathematics and Natural Sciences
   Not applicable for engineering majors

Area C: Arts and Humanities (12 Units)
1. Introduction to Arts (3)
   ART 101, 201A, 201B, 311, 312, DANC 101, MUS 100, 101
2. Introduction to the Humanities (3)
   Any lower division course in this category listed in the current class schedule
3. Explorations in the Arts and Humanities (3)
   Any upper-division course in this category listed in the current class schedule
4. Origins of the World Civilizations (3)
   HIST 110A or 110B, 210A, 210B

**Area D: Social Sciences (12 Units)**

1. Introduction to the Social Sciences (3)
   EGME 314 and EGME 490
2. World Civilizations and Cultures
   Not applicable for engineering majors
3. American History, Institutions and Values (3)
   AFRO 190, AMST 201, CHIC 190, HIST 180, 190, HONR 201A
4. American Government (3)
   HONR 201B, POSC 100
5. Explorations in Social Sciences (3)
   Any upper-division course in this category listed in the current class schedule

**Area E: Lifelong Learning and Self Development (3 Units)**

Not applicable for engineering majors

**Area Z: Cultural (3 Units)**

Take at least one star (*) course in Sections C.3 and D.5

**Upper-Division Writing Requirement**

In addition to a passing score on the Examination in Writing Proficiency (EWP), the following courses are required by all mechanical engineering majors: EGME 306A, 306B, 476A and 476B.

Written work for these courses must meet professional standards and requires completion with a grade of “C” (2.0) or better.

**Required Courses (39 units)**

EGEE 203L Electric Circuits Laboratory (1)
EGEE 303 Electronics (3)
EGME 306B Fluids and Thermal Laboratory (1)
EGME 322L Introduction to Computer-Aided Design (3)
EGME 331 Mechanical Behavior of Materials (3)
EGME 333 Fluid Mechanics & Aerodynamics (3)
EGME 335 Introduction to Mechanical Design (3)
EGME 407 Heat Transfer (3)
EGME 414 Design Project I (3)
EGME 419 Design Project II (2)
EGME 421 Mechanical Design (3)
EGME 426 Design of Thermal and Fluid Systems (3)
EGME 431 Mechanical Vibrations (3)
EGME 476A Dynamic Systems and Controls Lab (2)
EGME 476B Energy and Power Lab (2)
EGME 490 Seminar in Engineering (1)

**Technical Electives (11 units)**

Before enrolling in any elective course, approval of the adviser must be obtained.

**Power and Energy**

EGGN 403
EGME 417, 424, 447, 451, 452, 454

**Design and Materials for Manufacturing**

EGGN 403
EGME 315, 410, 411, 418, 422, 438, 454, 456, 457L, 459, 460, 461, 462, 463, 475, 480, 483, 486, 487

**Thermal and Fluids Engineering**

EGME 410, 417, 422, 447, 451, 452, 454, 486, 487

**Robotics, Controls and Automated Manufacturing**

EGGN 403
EGME 315, 410, 411, 422, 447, 451, 452, 454, 486, 487

**MANUFACTURING ENGINEERING EMPHASIS**

See the Bachelor of Science in Mechanical Engineering section of this catalog for requirements in mathematics and science foundation courses (30 units), engineering core courses (24 units) and general education coursework.

**Required Courses (43 units)**

EGEE 203L Electric Circuits laboratory (1)
EGEE 303 Electronics (3)
EGME 306B Fluids and Thermal Laboratory (1)
EGME 322L Introduction to Computer-Aided Design (3)
EGME 331 Mechanical Behavior of Materials (3)
EGME 333 Fluid Mechanics and Aerodynamics (3)
EGME 335 Introduction to Mechanical Design (3)
EGME 476A Dynamic Systems and Controls Lab (2)
EGME 407 Heat Transfer (3)
EGME 414 Design Project I (3)
EGME 419 Design Project II (2)
EGME 421 Mechanical Design (3)
EGME 426 Design of Thermal and Fluid Systems (3)
EGME 461 Fabrication Methods (3)
EGME 463 Introduction to Robotics (3)
EGME 483 Computer-Aided Manufacturing (3)
EGME 490 Seminar in Engineering (1)

**Technical Electives (9 units)**

Approval of the adviser must be obtained before enrolling in any elective course.

EGME 315, 410, 411, 422, 454, 459, 460, 462, 480
EGEG 323, 404, 404L, 445, 445L
MASTER OF SCIENCE IN MECHANICAL ENGINEERING
(30 UNITS)

To qualify for admission to a conditionally classified standing, applicants must meet the following university and departmental requirements:

- Bachelor’s degree from a regionally accredited institution, e.g., Western Association of Schools and Colleges (WASC)
- Bachelor’s degree in mechanical engineering from an institution accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700
- Minimum GPA of 2.5 in the last 60 semester units
- Good standing at the last institution attended

Students not meeting the above requirements may be admitted at the discretion of the department head and will be required to take an additional six or more units of adviser-approved prerequisite coursework. The student must demonstrate potential for graduate study by earning a grade point average of 3.0 or higher in these courses.

Any student entering the Master of Science degree program without a B.S. in Mechanical Engineering will also be required to complete courses in the areas where the student is deemed to be deficient, prior to beginning coursework for the Master’s degree.

Application Deadlines
Reference www.fullerton.edu/ecs for application information.

Classified Standing
Students meeting the following additional requirements will be advanced to classified standing and are eligible to take graduate courses for which they are qualified:

1. complete all deficiency work, specified by the mechanical engineering graduate program adviser, with a grade of “B” (3.0) or better;
2. meet with an adviser prior to completing nine units toward the M.S. degree at CSUF to develop a study plan, which must also be approved by the student’s graduate adviser, department chair and Office of Graduate Studies; and
3. fulfill the university writing requirement prior to completing nine units at CSUF toward the M.S. degree (Please refer to the “Graduate Regulations” section of this catalog and also the class schedule for further information on how this requirement can be met).

Study Plan
The study plan consists of adviser-approved upper-division or graduate-level coursework that must be completed with an overall grade-point average of at least 3.0. At least half the units required for the degree must be in approved graduate (500-level) courses.

Required Courses (3 units)
Adviser-approved math-oriented course (3)

Concentration Courses (15 units)
A student is required to select a minimum of 15 units in mechanical engineering. These units may be 400- and 500-level courses and are selected according to the student’s area of special interest. Coursework is designed to meet the student’s professional career goals and may focus on the following areas: Power and Energy, Design and Materials for Manufacturing, Thermal and Fluids Engineering, Robotics, Controls and Automated Manufacturing.

Other Courses (9 units)
Elective units should be taken in mechanical engineering or a related engineering field and are subject to adviser approval.

Exam/Thesis/Project Option (3-6 units)
Subject to approval by the adviser, students may select one of the following three options for final review by a department committee:

- Comprehensive oral examination over selected coursework (five courses, at least three of which are 500-level)
- EGME 597 Project (3-6 units)
- EGME 598 Thesis (3-6 units)

Students enrolling in less than six units of Thesis/Project will be required to take a comprehensive oral exam. Students enrolling in six units of thesis or project may defend their thesis or project work with an oral exam, limited to their project work, instead of taking a comprehensive oral exam.

MECHANICAL ENGINEERING COURSES
Courses are designated as EGME in the class schedule.

102 Graphical Communications (3)
Graphics as a fundamental means of communication in design. Development of spatial visualization. Freehand sketching and use of instruments, orthographic projection, pictorials. Dimensioning, tolerances, descriptive geometry, CAD principles and applications, AutoCAD, design procedure, cost analysis and freshman design project. (1 hour lecture, 6 hours laboratory)

205 Digital Computation (3)
Prerequisites: college algebra or three years of high school math, including a second course in algebra. Computers and their numerical applications. Programming languages, MathCAD spreadsheet, digital computation methods in statistics and solving algebraic equations. Applications of general purpose software for engineering analysis. (Same as EGGN 205)
214 Basic Machine Shop Practice and Safety (2)
Prerequisites: MATH 115, 125 or equivalents. Introduction to machine shop practices and drill press, grinding wheel, lathe, vertical mill and band saw. Thorough safety procedures instruction on each machine. Demonstrate safe practices on each machine. Introduction to measurement and tolerancing. Discussion and laboratory practice. (1 hour lecture, 3 hours laboratory.) Does not count toward fulfilling degree requirements. Credit/No Credit only.

304 Thermodynamics (3)
Prerequisites: CHEM 120A, MATH 150B, PHYS 225. Energy and its transformation; heat and work; conservation of mass and energy, system properties, irreversibility and availability. Ideal gases, heat engines and refrigeration (both ideal and actual), equipment selection and sizing.

306A Unified Laboratory (1)
Prerequisites: PHYS 225 and EGME 102. Corequisite: EGME 205. Static and dynamic measurements (tension and strain test on beams, columns, charpy, gyroscopes) using mechanical and electrical transducers. Use of computers in data acquisition, reduction and analysis. Each student must write a complete set of reports and pass with a “C” (2.0) or better. (3 hours laboratory)

306B Fluids and Thermal Laboratory (1)
Prerequisites: EGME 306A and 333. Corequisite: EGME 407. Continuation of EGME 306A. Flow, temperature and pressure measurement. Experimental studies of fluid friction and heat exchanger performance. Use of computers in data acquisition, reduction and analysis. Each student must write a complete set of technical reports and pass with a “C” (2.0) or better. (3 hours laboratory)

308 Engineering Analysis and Statistics (3)
(Same as Civil Engineering 308, Electric Engineering 308 and Engineering 308)

314 Engineering Economy (2)
Prerequisite: junior or senior standing in engineering. Development, evaluation and presentation of alternatives for engineering systems and projects using principles of engineering economy and cost benefit analysis. (Same as EGGN 314)

315 Basic Fabrication Techniques and Manufacturing Practices (3)
Prerequisite: EGME 102. Conventional fabrication techniques, measuring, referencing and tolerances applied to manufacturing such as tooling, computer numerical control machining and process indices. Safety instruction for use of campus machine shop equipment. (2 hours discussion and 2 hours laboratory)

322L Introduction to Computer-Aided Design (3)
Prerequisites: EGME 331, EGCE 302. Introduction to modeling, assembly, design documentation and analysis using typical commercial CAD/CAE software. Use of online resources in the collaborative design process. Design file transfer protocols. Design project using a technology based team environment. CAD/CAE system selection criteria. (1 hour discussion, 6 hours laboratory). (Same as Computer Science 322L)

331 Mechanical Behavior of Materials (3)

333 Fluid Mechanics and Aerodynamics (3)
Prerequisites: EGME 205 and EGME 304. Principles of fluid mechanics and their applications; fluid properties; fluid statics; one-dimensional incompressible flow; concepts of multi-dimensional flows including conservation principles; similitude and dimensional analysis; internal and external viscous flow; elements of compressible flow; design considerations in fluid mechanics.

335 Introduction to Mechanical Design (3)
Prerequisites: EGME 205, EGCE 302, EGME 102. Kinematics and dynamics of mechanisms; design and analysis of linkages, gears and cams through the use of analytical, graphical and computer-aided techniques.

350 Living and Working in Space (3)

407 Heat Transfer (3)
Prerequisites: MATH 250B and EGME 333. Principles of heat transfer and their applications: introduction to conductive, convective and radiation heat transfer; one-dimensional heat conduction; concepts of multi-dimensional conduction; convective heat transfer for internal and external viscous flows; cross-flow and shell and tube heat exchangers; thermal system design.

410 Introduction to the Finite Element Method and Applications (3)
Prerequisite: approved study plan. Basic concepts of integral and matrix formulation of boundary value problems. One dimensional finite element formulation of heat transfer, truss beam and vibration problems. Applications of commercial finite element programs. Selection criteria for code, element and hardware. CAD system interfaces.
411 Mechanical Control Systems (3)
Prerequisites: EGME 205 and 308, and EGCE 302. Mechanical control system design and analysis. Pneumatic, hydraulic, electromechanical actuators and devices. Stability criteria, root locus plots, frequency response analysis and design, transfer functions, introduction to feedback control and microprocessor applications.

414 Design Project I (3)
Prerequisites: EGME 322L and 421. Corequisite: EGME 426. Design methodology, CAD/CAE philosophy, optimization, product liability, probability/statistical principles, ASME codes, safety, human factors, material selection, legal aspects of design, professional ethics. Design project to be constructed in EGME 419, but feasibility study, preliminary design, assembly drawings, interim and final written project reports, interim and final oral presentations are required for 414. (1 hour lecture and 6 hours laboratory)

417 Computational Heat Transfer (3)

418 Space and Rocket Engineering (3)

419 Design Project II (2)
Prerequisite: EGME 414. Completion of the design project initiated in EGME 414. Construction of prototype, model or components. Test proposed design, and prepare a written final design report. Teamwork and communications skills are emphasized. Interim and final oral presentations are required. (6 hours laboratory)

421 Mechanical Design (3)
Prerequisites: EGCE 331 and 335. Design and application of machine components such as brakes, clutches, gears, springs, fasteners, pulleys and belting lubrication of machine elements, bearings, gaskets, seals, “O” rings, methods for study of impact, dynamic loading and fatigue; comprehensive treatment of failure, safety and reliability.

422 Mechanical Design Using Pro/ENGINEER (3)
Prerequisite: EGME 322L or equivalent. Modeling, assembly and design documentation using Pro/ENGINEER. Design of mechanical components and assemblies using Advanced Pro/ENGINEER features such as blends, drafts, user defined features, relations, family tables and assembly management. Collaborative design project, utilizing online resources. May be repeated for one credit.

424 Data Acquisition and Instrumentation Using LabVIEW (3)
Prerequisite: EGME 306A or equivalent. Graphical programming; design and development of virtual instruments using LabVIEW programming environment; building applications for data acquisition and data reduction, measurement, testing and control of engineering systems; collaborative term project. (2 hours discussion, 3 hours laboratory)

426 Design of Thermal and Fluid Systems (3)
Prerequisite: EGME 407. Integration of fundamental principles of thermodynamics, fluid mechanics, heat transfer and related subjects in the design of thermal and fluid systems. Design process and economics are applied to pumps, fans, turbines, boilers, piping systems, cross-flow and shell and tube heat exchangers.

431 Mechanical Vibrations (3)

438 Analytical Methods in Engineering (3)
Prerequisite: EGME 308. Ordinary and partial differential equations with constant and variable coefficients; orthogonal functions; conformal mapping; potential theory; engineering applications.

447 Piping Selection and Piping Network Design (3)
Prerequisites: EGME 333 and EGCE 301 or EGME 331. Pressure losses in piping networks; selection of piping based upon fluid, temperature, pressure and economic considerations; piping connections, fittings and components; stress analysis; review of national piping codes.

451 Heating, Ventilating and Air Conditioning Systems (3)
Prerequisites: EGME 304 and 407. The fundamentals of controlling heating, ventilating and air conditioning systems. Theory and analysis of fundamental thermodynamics relating to these systems. Laboratory demonstrations of actual systems.

452 Fluid Machinery (3)
Prerequisites: EGME 304 and 333. Thermal and hydraulic design and analysis of pumps, fans, turbines and compressors. Component selection, system design and performance evaluations.

454 Optimization of Engineering Design (3)
Prerequisite: EGME 308. Application of analytical and computer optimization techniques to engineering design problems. Presentation of design as an optimization task. One dimensional minimization. Unconstrained and constrained nonlinear programming. Approximation concepts. Duality. Computer applications to design problems using a general purpose optimization program.
456 Introduction to Mechatronics for Engineers (3)

457L Intelligent Systems Laboratory (2)
Prerequisite: EGME 456. Design and assembly of microprocessor-based mechanisms. Lab experiments encompass machine/high level programming and interfacing of microcontrollers with sensors and actuators. Design project. (1 hour lecture, 3 hours laboratory)

459 Plastics and Other Non-Metallics (3)

460 Failure of Engineering Materials (3)
Prerequisite: EGME 331. Imperfections in solids; fracture initiation and crack propagation; dislocations; yield point phenomenon; fatigue; creep; ultrasonic effects; radiation damage; stress corrosion; hydrogen embrittlement; failure of composite materials.

461 Fabrication Methods (3)
Prerequisite: EGME 331. Manufacturing processes. Metal joining processes. Casting, forging, powder metallurgy, machining and machining tools, finishing, coating, plating, non-metallic materials inspection and gaging and tolerances.

462 Composite Materials (3)
Prerequisite: EGCE 301 or EGME 331. Application, mechanical properties and fabrication studies of fiber reinforced composite materials, stress analysis of laminated anisotropic composite structures. Studies of special problems unique to composites.

463 Introduction to Robotics (3)
Prerequisite: EGME 335. Corequisite: EGME 376A. Kinematic, dynamic, control and programming fundamentals associated with industrial robots and programmable manipulators. Trajectory planning, application of robotics in manufacturing and integration of robots into flexible manufacturing systems.

475 Acoustics and Noise Control (3)
Prerequisite: PHYS 227. Basic phenomena on the propagation, absorption and generation of acoustic waves, specification and measurement of noise, effects of noise on speech and behavior, legal aspects of industrial and building noise, principles and application of noise control.

476A Dynamic Systems and Controls Laboratory (2)
Prerequisite: EGME 431 and 306B. Dynamic systems, vibration, acoustics and other mechanical components; computer simulation of dynamic systems (Simulink and computer-aided data acquisition); robotics, computer-controlled machining and automatic data acquisition. Computers in data acquisition, reduction and analysis. Each student must write a complete set of individual engineering laboratory reports. Must pass with a “C” (2.0) or better to count towards the upper-division writing requirement. Not available for graduate degree credit. (6 hours laboratory)

476B Energy and Power Laboratory (2)
Prerequisites: EGME 304, 306B, 407. Mass transfer, heat transfer and thermodynamic phenomena and their interaction with mechanical systems. Team experiment. Use of computers in data acquisition, reduction and analysis. Each student must write a complete set of individual engineering laboratory reports. Must pass with a “C” (2.0) or better to count towards the upper-division writing requirement. Not available for graduate degree credit. (6 hours laboratory)

480 Human Factors in Engineering (3)
Prerequisite: approved study plan. Principles of design for making products and systems faster, easier and more effective to use. Design project using these principles that consider human capabilities and limitation of senses and responses to sensory stimuli. Physiological, psychological and work factors are evaluated for design of equipment, work methods, environments and standards.

483 Computer-Aided Manufacturing (3)
Prerequisite: EGME 476A or equivalent. Introduction to computer-aided manufacturing processes. CNC machines, robot and PLC programming. Design for CIM. Fixed and flexible manufacturing systems. Process planning and scheduling. Simulation software for manufacturing systems. Laboratory experiments. (1 hour discussion, 4 hours laboratory)

486 Introduction to Electronics Packaging (3)

487 Thermal Control of Electronics Packaging (3)
Prerequisites: EGME 308 and 407. Fluid mechanics and heat transfer as related to the thermal control of electronic packages of varying sizes. Analysis of individual components, complete boards and complete systems is considered. Liquid and gas cooling mediums.

490 Seminar in Engineering (1)
Prerequisite: senior standing in engineering. Engineering profession, professional ethics and related topics. May be repeated once for credit with the approval of the department.
497 Senior Project (1-3)
Prerequisite: consent of instructor, adviser and department head. Directed independent design project.

499 Independent Study (1-3)
Prerequisite: approval of study plan by adviser and department head. Specialized topics in engineering, selected in consultation with and completed under the supervision of the instructor. May be repeated for credit.

508 Advanced Inviscid Fluid Flow (3)
Prerequisites: EGME 205, 308, EGME 333. Two- and three-dimensional potential flow theory. Sources, sinks, vortices, Rankine bodies, free jets, channel flow, air foils. Introduction to computational fluid dynamics. Complex potential and various transformation techniques are used.

511 Advanced Mechanical Vibrations (3)
Prerequisite: EGME 431. Vibrations in rotating and reciprocating machines; noise and vibration in fluid machinery; continuous systems; random vibrations; transient and nonlinear vibration, computer applications.

512 Advanced Mechanical Design and Management (3)
Prerequisite: EGME 421 or equivalent. Advanced modern mechanisms. Analysis and synthesis of mechanisms. Advanced topics in computer-aided design of mechanical, thermal and fluid systems. Methodology of modern design. Optimization in design.

516 Advanced Radiation Heat Transfer (3)
Prerequisite: EGME 407. Radiation heat transfer, including study of the geometric shape factors, ideal (black) and real systems, and energy transfer in absorbing, scattering and emitting media, and radiation combined with other modes of energy transfer.

520 Advanced Viscous Fluid Flow (3)

526 Advanced Convective Heat Transfer (3)
Prerequisite: EGME 407. Convective heat transfer; heat transfer in external and internal flow fields for both laminar and turbulent fluid flow, applications.

530 Advanced Strength of Materials (3)
Prerequisite: EGME 421. Energy methods. Castilian’s theorem. Curved beams, beams on elastic supports, thick wall cylinders, shrink fits, localized stress, column instability, failure theories, bearings.

536 Advanced Conduction Heat Transfer (3)
Prerequisite: EGME 407. Conduction heat transfer; Bessel and Legendre transforms, eigenfunctions, Fourier series solutions, heat sources and sinks, multidimensional problems, transient systems and numerical methods (finite difference and finite element methods).

538 Advanced Engineering Analysis (3)
Prerequisite: EGME 438. Partial differential equations in engineering, numerical techniques, integral equations, engineering applications.

540 Computer Applications in Engineering Design (3)

541 Finite Element Method for Mechanical Engineers (3)

554 Applied Optimal Mechanical Design (3)
Prerequisite: EGME 454 or equivalent. Formulation of design optimization problems in mechanical engineering. Mathematical programming methods. Practical aspects of optimization. Design of complex mechanical systems. Individual projects will be assigned to apply optimization techniques to an engineering system or component.

576 Advanced Dynamics and Control of Mechanical Systems (3)
Prerequisite: EGME 411. Advanced study of the dynamics and control of mechanical systems including: state space modeling, Lyapunov stability, modern design techniques and case studies.

597 Project (1-6)
Prerequisite: consent of graduate program adviser.

598 Thesis (1-6)
Prerequisite: consent of graduate program adviser.

599 Independent Graduate Research (1-3)
Prerequisite: classified graduate status. Open to graduate students only by consent of Mechanical Engineering graduate program adviser. May be repeated for credit only upon approval by the graduate program adviser.
INTRODUCTION

The Military Science Program focuses on academics, teamwork and physical fitness, and is integrity-based with a mentorship program in place to support all cadets. Military Science provides a dynamic dimension to the university by offering an unmatched hands-on leadership and management education. Military Science is also a university endorsed coed club and offers various extracurricular teams and activities such as "Ranger Challenge" (intercollegiate competition based on physical fitness and agility, rifle marksmanship and map reading/land navigation), Paintball, one Field Training Exercise (overnight bivouac) per semester, rappelling demonstrations and a Color Guard team (presents flags at ceremonies and events), as well as several other exciting activities. All curriculum and activities are designed to build and enhance leadership, management and team-building skills that apply to military and civilian sectors, and last a lifetime.

Military Science courses are accredited and available to students in all academic disciplines. Full-time students are also eligible to enroll as cadets in accordance with university and Department of the Defense policies. Several competitive financial assistance programs are available, which include: four-, three- and two-year scholarships; Reserve Forces and National Guard duty; GI Bill; and loan repayment options. Additionally, scholarship recipients and Advanced course students earn up to $500 per month in stipends.

Upon successful completion of the two- or four-year Reserve Officers Training Corps (ROTC) program, cadets are commissioned as second lieutenants in the United States Army, United States Army Reserves or Army National Guard.

Four-Year Program

This program is composed of a lower-division Basic Course and an upper division Advanced Course. The Basic Course refers to first- and second-year courses (MLSC 101, 102, 201 and 202) that are designed for beginning students who want to try Reserve Officers Training Corps (ROTC) without obligation. Once the Basic Course is completed, students qualify for entry into the upper-division Advanced Course (MLSC 301, 302, 401, 402), which prepares them to be commissioned as officers in the United States Army, the Army Reserves or the Army National Guard. Upon entry into the Advanced Course, cadets are required to sign a contract with the Department of the Army agreeing to complete the ROTC program and accept a commission as a second lieutenant. Once the contract is signed, advanced course cadets will receive up to $500 per month, along with free uniforms for all military science courses.

Two-Year Program

This program is for those students who have at least four semesters of work remaining on campus as either an undergraduate or graduate student, and who did not participate in ROTC earlier. These students enter the Advanced Course of the program after attending a four-week, all expenses paid, summer leadership internship or provid-
ing proof of completion of Military Basic Training, or three years JROTC. Students enrolled in the two-year program are eligible for contracting under the same benefits, requirements and guidelines as the four-year students.

**International Learning Opportunities in Military Science**

Summer Internship Program is an overseas culture immersion internship aimed at broadening the cultural understanding of junior officers. Since the Army is in a number of countries across the world, it is critical that young officers understand different cultures to ensure the building of strong relationships.

Advanced course students have an opportunity to attend overseas Cadet Troop Leadership Training (CTLT) for three weeks between their junior and senior years. CTLT gives cadets a chance to serve as an acting platoon leader with an actual active duty U.S. Army unit. Many of the CTLT positions are with overseas units in Korea and Europe. Additionally, commissioned second lieutenants selected for active duty will have the opportunity to serve at duty stations all over the world, work with fellow military officers from other countries, attend foreign military schools and immerse themselves in the culture of their host nation while they live and work there.

Interested contracted cadets with strong cumulative grade point averages and who are physically fit have the opportunity to be sent to a three-week Army Airborne School or 10-day Air Assault School.

**MINOR IN MILITARY SCIENCE (23 UNITS)**

The Military Science minor consists of a combination of courses from many disciplines. Students interested in this program should seek additional information from the Military Science Program office.

**GENERAL REQUIREMENTS**

All enrolled cadets will take courses corresponding to their academic standing in order to remain academically aligned.

MLSC 100  Army Physical Training (1)

MLSC 101  Leadership and Personal Development (3)

MLSC 102  Introduction to Tactical Leadership (3)

**Sophomore**

MLSC 201  Innovative Team Leadership (3)

MLSC 202  Foundations of Tactical Leadership (3)

**Leadership Training Course**

The Leadership Training Course (LTC) is four weeks of classroom and field training held during the summer at Fort Knox, Kent. This course is an accelerated version of the two years of leadership development training cadets receive in the Basic Course. By transforming themselves through this rigorous training, cadets will qualify for enrollment in Advanced Army ROTC on campus – provided they have two years of college remaining (undergraduate or graduate). This course is for those who did not participate in military science during their freshman and sophomore years. It is not Army basic training and there are no drill sergeants.

**Junior**

MLSC 301  Adaptive Tactical Leadership (4)

MLSC 302  Leadership in Changing Environments (4)

**Leadership Development and Assessment Course**

Every Army ROTC cadet who enters into the Advanced Course attends the Leadership Development and Assessment Course (LDAC) at Ft. Lewis, Wash. This course normally takes place between the junior and senior years of college and is the most important training event for an Army ROTC cadet. The 29-day training event incorporates a wide range of subjects designed to develop and evaluate leadership ability. The challenges are rigorous and demanding, both mentally and physically. LDAC tests intelligence, common sense, ingenuity and stamina. These challenges provide a new perspective on an individual’s ability to perform exacting tasks and to make difficult decisions in demanding situations.

**Senior**

MLSC 401  Developmental Leadership (4)

MLSC 402  Adaptive Leadership (4)

**Required for Commissioning**

MLSC 450  Military History Seminar (3)

(or approved Military History course)

**MILITARY SCIENCE COURSES**

Courses are designated as MLSC in the class schedule.

100  Army Physical Training (1)

Required each semester of all students in the Military Science program. Improve and maintain physical fitness level of participants while teaching standards for the conduct of Army Physical Training (PT). Develop a good understanding of the Army Physical Fitness Program in accordance with FM 21-20, to participate, cooperate, have fun and become physically fit. May be repeated for credit.

101  Leadership and Personal Development (3)

Introduces personal challenges and competencies that are critical for effective leadership. How personal development of life skills such as critical thinking, goal setting, time management, physical fitness and stress management relate to leadership, officership and the Army profession. (1.5 hours lecture, 3 hours laboratory)

102  Introduction to Tactical Leadership (3)

Leadership fundamentals, such as setting direction, problem solving, listening, presenting briefs, providing feedback and using effective writing skills. Dimensions of leadership values, attributes, skills and actions in the context of practical, hands-on and interactive exercises. (2 hours lecture, 3 hours laboratory)
201  Innovative Team Leadership (3)
Dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of Army leadership framework: trait and behavioral theories. Practice aspects of personal motivation and team building in the context of planning, executing and assessing team exercises. (2 hours lecture, 3 hours laboratory)

202  Foundations of Tactical Leadership (3)
Challenges of leading tactical teams in the complex Contemporary Operating Environment (COE). Dimensions of terrain analysis, patrolling and operation orders. Theoretical basis of the Army leadership framework explores the dynamic of adaptive leadership in the context of military operations (2 hours lecture, 3 hours laboratory)

301  Adaptive Tactical Leadership (4)
Challenges cadets to study, practice and evaluate adaptive tactical leadership skills as they are presented with challenging scenarios related to squad tactical operations. Students receive systematic and specific feedback on their leadership attributes and actions. (3 hours lecture, 3 hours laboratory)

302  Leadership in Changing Environments (4)
Increasingly intense situational leadership challenges to build cadet awareness and skills in leading tactical operations up to platoon level. Review aspects of combat, stability and support operations. Exploring, evaluating and developing skills in decision-making, persuading and motivating team members in the Contemporary Operating Environment (COE). (3 hours lecture, 3 hours laboratory)

401  Developmental Leadership (4)
Develops proficiency in planning, executing and assessing complex operations, functioning as a member of a staff and providing performance feedback to subordinates. Situational opportunities to assess risk, make ethical decisions and lead fellow ROTC cadets. Lessons on military justice and personnel processes prepare students to make transition to becoming Army officers. (3 hours lecture, 3 hours laboratory)

402  Adaptive Leadership (4)
Dynamics of leading in the complex situations of current military operations in the Contemporary Operating Environment (COE). Differences in customs and courtesies, military law, principles of war and rules of engagement in the face of international terrorism. Aspects of interacting with non-governmental organizations, civilians on the battlefield and host nation support. (3 hours lecture, 3 hours laboratory)

450  Military History Seminar (3)
Selected case studies in military history as they relate to the modern challenges facing the American profession of arms. Emphasizes written reports, oral presentations, discussion and field study. This course satisfies commissioning requirements.
INTRODUCTION

The Department of Modern Languages and Literatures offers a wide diversity of programs of language, cultural studies, linguistics, literature and teacher education aimed at meeting the varying needs of today's students.

In our changing world, we must lower barriers to understanding. In learning another language, we also gain insights into the thinking of another culture (often very different from our own); insights that afford us the perspective necessary to critically examine our own cultural values. Language, culture, linguistics and literature are integrally related facets of the complex phenomenon of human communication that help us better understand ourselves, each other, our values and our roles in a changing multicultural world.

In addition to our degree and certificate programs, we offer coursework in Arabic, Chinese, Italian, Korean, Latin, Persian and Vietnamese.

Our programs are designed for those who wish to pursue more advanced studies of language and literature, as well as for the growing number of individuals who will find ability to communicate in other languages and sensitivity to other cultures important components in career preparation in the United States and abroad. They are designed for those planning careers in education, government, social services, translation services, assessment, literature and the expanding areas of international business.

Our goal is to assist students in developing competence in other languages through teaching the majority of our courses in the target language. We strive to deepen students’ knowledge about language and the humanities through various means—reading representative authors in their respective literatures, familiarizing students with the cultural traditions of the peoples whose language they study, and expanding students’ knowledge of linguistics and socio-cultural context.

LEARNING GOALS AND STUDENT LEARNING OUTCOMES

French

The following learning goals and learning outcomes have been established for students pursuing a bachelor’s degree in French:

Language
- Communicate effectively and culturally-appropriately in oral and written form in a variety of social and professional circumstances

Culture
- Acquire a comprehensive understanding of French history as well as modern culture and society in its various aspects, from daily life to general socio-economic and institutional structures

Linguistics
- Gain knowledge in the structure of the French language as well as current issues in French linguistics, and develop comparative analyses of the French and English languages
**Literature**
- Gain knowledge of the major French literary movements while situating them in their socio-historical contexts. Develop a greater appreciation of French literature, as well as the analytical tools to produce informed and critical readings of French literary texts.

**Japanese**
The following learning goals and learning outcomes have been established for students pursuing a bachelor's degree in Japanese:

**Language**
- Communicate effectively and in a culturally appropriate manner in oral and written form in a variety of social and professional circumstances.

**Culture**
- Gain a comprehensive understanding of the historical development and contemporary state of the Japanese people and society, and analyze how the Japanese cultural background may influence modern life e.g. communication, styles of interaction, and family structure.

**Literature**
- Deepen appreciation and knowledge of major literary movements in Japan, and develop analytical and critical abilities working with a variety of literary texts.

**Linguistics**
- Gain knowledge of the structure of the Japanese language and current issues in Japanese linguistics, and compare and contrast the structural differences between Japanese and English.

**Spanish**
The following goals and learning outcomes have been established for students pursuing a bachelor's degree in Spanish:

**Language Proficiency**
- Demonstrate advanced proficiency in Spanish in oral and written form.

**Linguistic and Literary Analysis**
- Understand language as a system and as a tool for communication.
- Recognize discrete language segments.
- Distinguish synchronic and diachronic factors of language variation and the catalysts behind such changes.
- Interpret and discuss literary works.
- Identify the salient characteristics of different literary genres.
- Incorporate literary terms appropriately into textual analysis.
- Explain the socio-historical contexts of literary works.

**Cultural Awareness**
- Understand the historical and cultural roles of Spanish-speaking countries and peoples in a global context.
- Identify past and current regional trends in the Hispanic world, as well as their implications.

**Academic Dialogue**
- Synthesize critics' ideas.
- Distinguish between varying perspectives.
- Formulate sound arguments and support them with appropriate evidence.
- Demonstrate appropriate written and oral expression in the target language.

**TESOL**
The following goals and learning outcomes have been established for students pursuing a degree in TESOL:

**Achieve personal, civic, educational and career goals**
- Understand and know the nature of language, English language systems, language learning and language in culture.
- Can effectively plan and sequence English as a Second (ESL) or English as Foreign Language (EFL) instruction in the school setting based on their knowledge of culture, sociolinguistics, pedagogy, second language acquisition, assessment and curriculum.
- Prepared for careers as teachers or resource specialists in the field of teaching ESL or EFL and have specializations in such areas as culture and language, testing and research, and professional education.

**Develop the habit of intellectual inquiry and communicate effectively**
- Aware of philosophical and research foundations of second language acquisition and pedagogy.
- Demonstrate English spoken and written language proficiency at a level commensurate with role as language models.
- Studied at least two years of one foreign language or one year each of two different languages or possess the equivalent knowledge and skill.
- Make judicious use of instructional resources and teaching strategies.
- Use problem-solving and critical thinking in analyzing ESL/EFL instructional settings and materials with awareness of relevant language policy issues.
- Self-directed learners who are able to demonstrate, articulate, reflect upon and evaluate what they have learned.
- Can read and interpret research findings in the field.

**Use state-of-the-art technology**
- Understand the importance of equitable access to state-of-the-art technology and use of technology to enhance professional growth.
- Know how to integrate advances in information technology (such as e-mail, internet, and database research) in their teaching and research.
- Plan purposeful learning activities for students which incorporate multi-media resources and equipment.
Work effectively in multicultural environments
- Aware of and value the cultures of English-speaking peoples as well as other diverse cultures
- Intellectually sensitive and draw on the values, backgrounds, prior knowledge and interests of their diverse student populations
- Competent professionals who apply theoretical and methodological training to educational settings in the U.S. and abroad
- Hold a global perspective which seeks to uphold and safeguard human dignity

Work effectively in collaborative settings
- Participate in faculty/student activities, research and instructional programs
- Participate in cross-unit collaborations on campus and in the community through tutoring programs, writing programs, learning resource centers, intensive language programs, and community-based centers

Language Concentration for International Business
The Department of Modern Languages and Literatures offers language concentrations in Chinese, French, German, Japanese, Portuguese and Spanish. This component of the B.A. in International Business consists of 15 units of upper-division language study (including an internship). These courses, as well as the prerequisites, must be completed with a grade of “C” (2.0) or better. For description of the international business program, please see the “International Business” section of this catalog.

Upper-Division Writing Requirement
MLNG 301 satisfies the course portion of the upper-division writing requirement for all foreign language majors.

Academic Standards Requirement
Each course counted to fulfill requirements for the major or minor must be completed with a grade of “C” (2.0) or better.

Advanced Placement
Students should enroll at the point in the sequence of courses for which their previous study and/or experience has prepared them. Students with no language background should enroll in fundamental 101-level courses. Normally, two years of high school language study are considered to be equivalent to one year of college language. Students just completing two years of high school language should begin at 200-level intermediate courses. A minimum of four years of high school language, or its equivalent, is considered a prerequisite for more advanced 300-level major work.

Courses at the 101 level are not open to students who have completed two or more years of high school study or one term of college study in that language unless such study was completed three years or more before entering the class. Courses at the 102 level are not open to students who have completed two or more years of high school study or two terms of college study in that language unless such study was completed two years or more before entering the class. Language courses at the 100 level are not open to native speakers of that language.

Due to the sequential nature of language instruction, consultation with an adviser in the Department of Modern Languages and Literatures is essential before enrolling in courses.

International Baccalaureate Program
Students entering the university with the International Baccalaureate shall request an oral interview with two instructors of the target language. Subject to their recommendation, the following credit may be awarded:

Students with the International Baccalaureate Higher Level Language Exam with a grade of four or better will have lower-division requirements waived, and upon recommendation will receive three to 12 units of upper-division language credit.

Students with the International Baccalaureate Subsidiary Level Language B Exam with a grade of four or better will have lower-division requirements waived, and upon recommendation will receive up to six units of upper-division language credit. If no upper-division units are recommended, a minimum of six units of 200-level credit will be awarded.

BACHELOR OF ARTS IN FRENCH (120 UNITS)
The Bachelor of Arts in French consists of 30 units of upper-division French coursework, plus MLNG 301. Prior to undertaking upper-division work, French majors will have completed the following lower-division courses or their equivalents:

Basic Requirements (20 units)
FREN 101 Fundamental French-A (5)
FREN 102 Fundamental French-B (5)
FREN 203 Intermediate French-A (3)
FREN 204 Intermediate French-B (3)
FREN 213 Intermediate Diction and Phonetics (2)
FREN 214 Intermediate Conversation and Composition (2)

Upper-Division Requirements (33 units)
Upper-Division Writing Requirement (3 units)
MLNG 301 Writing in an Intercultural Context (3) †
Language (3 units required*, up to 9 units)
FREN 307† OR 308†; 310, 408
Linguistics (3 units required*, up to 9 units)
FREN 300, 409, 466
Civilization and Culture (6 units required, up to 12 units)
FREN 315†, 325†, 311, 407, 435T
Literature (6 units required, up to 12 units)
FREN 375 Explorations in Literature (3) †
One of the following Interdisciplinary Approaches to Literature:
FREN 470, 471, 472, 475
Capstone Seminar (3 units)
FREN 485†

Electives (9 units)
A minimum of six at the 400-level from at least two of the categories: language, linguistics, civilization and culture, literature

* Six (6) units are required in each of the areas for the Single Subject Matter Preparation Program for the Secondary Education Teaching Credential
† Required

MINOR IN FRENCH (12 UNITS)
Intermediate-level competency is required in French prior to pursuing the minor.

Upper-Division Requirements (12 units)
Six units from the following:
FREN 307  Advanced Composition and Grammar (3)
OR FREN 308  Advanced Composition and Grammar (3)
FREN 315  Origins of Modern France (3)
OR FREN 325  Contemporary French Civilization (3)
In consultation with an adviser, six units from the following, if not taken above:
FREN 300; 307 OR 308; 310, 311; 315 OR 325; 375, 407, 408, 409, 415, 425, 435T, 466, 470, 471, 472, 475, 485

MINOR IN GERMAN (12 units)
Intermediate-level competency is required in German prior to pursuing the minor.

Upper-Division Requirements (12 units)
Six units from the following:
GRMN 310; 315 OR 325
In consultation with an adviser, six units from the following:
GRMN 300, 310, 311, 315, 325, 335, 399, 400, 405, 466, 485T

BACHELOR OF ARTS IN JAPANESE (120 UNITS)
The Bachelor of Arts in Japanese consists of 30 units of upper-division Japanese coursework, plus the required 3-unit upper-division English writing course, Modern Language (MLNG) 301. Prior to undertaking upper-division work, the Japanese major will have completed the following lower-division courses or their equivalents:

Basic Requirements (20 units)
JAPN 101  Fundamental Japanese-A (5)
JAPN 102  Fundamental Japanese-B (5)
JAPN 203  Intermediate Japanese-A (5)
JAPN 204  Intermediate Japanese-B (5)
JAPN 299  Directed Study (1-3)

Upper-Division Core Requirements (18 units)
JAPN 305  Advanced Japanese-A (3)*
JAPN 306  Advanced Japanese-B (3)*
JAPN 307  Advanced Spoken Japanese (3)*
JAPN 308  Advanced Writing Japanese (3)
JAPN 310  Japanese for Business (3)
JAPN 311  Japanese for International Business (3)
JAPN 315  Introduction to Japanese Civilization (3)
JAPN 316  Modern Japan (3)

Upper-Division Electives (12 units)
JAPN 375, 420, 440, 450, 466, 468, 485T, 499

MINOR IN JAPANESE (12 UNITS)
Intermediate-level competency is required in Japanese prior to pursuing the minor.

Upper-Division Requirements (12 units)
Six units required from the following:
JAPN 305*, 306*, 307*, 308
Six units from the following:
JAPN 310, 311, 315, 316, 375, 420, 440, 450, 466, 468, 485T, 499

MINOR IN PORTUGUESE (12 UNITS)
Intermediate-level competency is required in Portuguese prior to pursuing the minor.

Upper-Division Requirements (12 units)
PORT 310  Portuguese in the Business World (3)
PORT 317  Advanced Conversation and Composition (3)
PORT 320  Introduction to Luso-Brazilian Culture and Civilization (3)
PORT 325  Contemporary Brazilian Civilization (3)

*Students with native or near-native proficiency are recommended to substitute an upper-division elective course in consultation with the major adviser.

BACHELOR OF ARTS IN SPANISH (120 UNITS)
The Bachelor of Arts in Spanish consists of 33 units of upper-division Spanish coursework, plus the required 3-unit upper-division English writing course, Modern Language (MLNG) 301. Prior to undertaking upper-division work, the Spanish major will have completed the following lower-division courses or their equivalents:

Basic Requirements (17-22 units)
SPAN 101/102  Fundamental Spanish (10)
OR SPAN 105  Intensive Review of Fundamental Spanish (5)
SPAN 203  Intermediate Spanish A (3)
SPAN 204  Intermediate Spanish B (3)
OR SPAN 202  Spanish for Spanish Speakers B (3)
SPAN 213 Intermediate Conversation* (3)
SPAN 214 Intermediate Composition (3)

*not open to native speakers.

Upper-Division Requirements (36 units)

Upper-Division Writing (3 units)
MLNG 301 Writing in an Intercultural Context (3)

Language (6 units)
SPAN 301 Advanced Grammar and Composition (3)
SPAN 400 Advanced Writing (3)

Culture (6 units)
SPAN 315 Introduction to Spanish Civilization (3)
SPAN 316 Introduction to Spanish-American Civilization (3)

Literature (9 units)
SPAN 375 Introduction to Literary Forms (3)
SPAN 430 Spanish Literature to Neoclassicism (3)
OR SPAN 461 Spanish Literature Since Neoclassicism (3)
SPAN 440 Spanish-American Literature to Modernismo (3)
OR SPAN 441 Spanish-American Literature Since Modernismo (3)

Linguistics (6 units)
SPAN 467 Spanish Morphology and Syntax (3)
SPAN 466 Spanish Phonology and Dialectology (3)
OR SPAN 468 Spanish-English Bilingualism and Language Contact (3)

Seminar (3 units)
SPAN 475T Topics in Spanish Peninsular Literature (3)
OR SPAN 485T Topics in Spanish American Literature (3)

Elective (3 units)
Any 400-level course not already taken, chosen in consultation with an adviser; 475T and 485T may be repeated with a different topic. SPAN 300, 310 and 311 not applicable.

MINOR IN SPANISH (12 UNITS)

Intermediate-level competency is required in Spanish prior to pursuing the minor.

Upper-Division Requirements (12 units)

Six units from the following:
SPAN 301 Advanced Grammar and Composition (3)
SPAN 315 Introduction to Spanish Civilization (3)
OR SPAN 316 Introduction to Spanish American Civilization (3)

Two additional upper-division courses, chosen in consultation with an adviser, from the following:
SPAN 300, 315, 316, 375, 400, 407, 408, 415, 416, 430, 440, 441, 461, 466, 467, 468, 475T, 485T

CERTIFICATE IN TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL)

In cooperation with the Department of English and Linguistics Programs, the Department of Modern Languages and Literatures offers a Certificate for Teaching English to Speakers of Other Languages (TESOL). The program consists of 24 units. In order to participate in the program, students must declare the TESOL Certificate along with their degree objective.

Admission Requirements

1. A baccalaureate degree from an accredited institution;
2. a grade-point average of at least 2.7 in the last 60 semester units attempted and a 3.0 grade-point average in the major;
3. good standing at the last college attended;
4. at least two years of one foreign language, or one year each of two different foreign languages, or the equivalent with an average 3.0 GPA. This requirement will normally be waived for students from foreign countries who have studied English as a foreign language;
5. MLNG 301 with a grade of “B-” (2.7) or better, or with program approval, the EWP with a score of 6 or better;
6. ENGL 303 with a grade of “B-” (2.7) or better; and
7. oral and written proficiency in English to be determined during the student's first semester in the program. A minimum IELTS score of 7.0 overall or a minimum TOEFL score of 573 for paper-based or 89 for the iBT, and a minimum score of 50 on the Test of Spoken English, or 26 on the speaking section of the iBT (to be verified no later than at the end of the student’s first semester in the program) are required for non-native English speaking applicants who completed their bachelor’s degrees outside of the U.S. in a language other than English.

Study Plan Core Courses (12 units)

The study plan must include 24 units of committee-approved coursework: 12 units of core courses, three units of language pedagogy, six units of electives and three units for the practicum. All TESOL Certificate students must obtain a minimum “B-” (2.7) grade in each core course and a “B” (3.0) average in all core, language pedagogy and elective courses combined.

TESL 500 Fundamentals in TESOL (3)
TESL 509 Advanced Principles of TESOL: Listening/Speaking Focus (3)*
TESL 510 Advanced Principles of TESOL: Reading/ Writing Focus (3)*
TESL 527 Second Language Acquisition (3)
Language Pedagogy (3 units)
TESL 515  Pedagogical Grammar in TESOL (3)*
   OR TESL 520  Teaching Pronunciation and Oral Discourse in TESOL (3)*
   OR TESL 525  Teaching Vocabulary in ESL/EFL Classroom (3)

   *In at least one of these courses each student will complete 20 hours of service learning at one of the sites approved by the TESOL Program.

Electives (6 units)
Select six units from the following:

Culture and Literature
ANTH 412, 470
CHIC 450, 480
HCOM 420, 422, 522
READ 560
TESL 511, 545
400- and 500-level adviser-approved American Studies courses
400- and 500-level adviser-approved English or American literature courses

Language and Linguistics
ANTH 416
FREN/GRMN/JAPN/SPAN 466
JAPN/SPAN 468
LING 406, 412, 417, 442, 505, 507, 508
READ 514
TESL 515, 520 or 525, if not taken as a language pedagogy course.

Testing, Technology and Research
ANTH 401
EDEL 511, 515, 518A, 518B, 522, 551, 590
EDSC 504, 524, 535
LING 501
PSYC 461, 465
READ 516, 520
TESL 530, 532

Professional Education
Elementary
EDEL 434, 500, 515, 521, 528, 529, 530, 531, 536, 541, 542, 552, 553
READ 508

Secondary
EDSC 410, 504, 524, 535, 540, 550
Adult/College
ENGL 402, 402S, 590
READ 507, 581

Culminating Experience (3 units)
TESL 596  TESOL Practicum (3)

   The practicum is to be taken at the end of the program. Students must consult with an adviser the semester before the practicum. Prerequisites are TESL 500, 509, 510 and 527. The core and language pedagogy courses must be completed with an average of “B-” (2.7) or better in order for students to enroll in the practicum.

MASTER OF ARTS IN SPANISH (30 UNITS)

Admission to Graduate Standing – Conditionally Classified
University requirements include: A baccalaureate from an accredited institution and a grade-point average of at least 2.5 in the last 60 semester units attempted. See the Graduate Admissions section of this catalog for complete statement and procedures.

Candidates will need a B.A. with a minimum GPA of 3.0 in Spanish, consisting of at least 24 units (or equivalent) of upper-division studies. A candidate presenting a bachelor of arts that has fewer than 24 upper-division units in the language, or whose background is otherwise inadequate, will be required to take additional courses with a minimum GPA of 3.0 to build a full undergraduate major before beginning the graduate program. The student must also demonstrate proficiency in English, either by passing the English Writing Proficiency exam or equivalent exam or by passing MLNG 301 or equivalent with a grade of “C” (2.0) or better.

Satisfactory evaluation of language proficiency by committee is also required. Adaptations of certain admission requirements may be made for promising foreign students.

Graduate Standing – Classified
A student who meets the requirements for conditionally classified graduate standing is eligible for classified graduate standing upon the development of an approved study plan, which should be done in consultation with the graduate adviser prior to the completion of nine graduate units.

Study Plan
The study plan requires at least 18 units of 500-level courses, distributed as follows:

Required Core Courses (6 units)
SPAN 500  Graduate Seminar: Advanced Structure and Style (3)
SPAN 530  Graduate Seminar: Historical Linguistics (3)

Graduate Seminars in Literature (12 units)
Peninsular Literature (6 units)
SPAN 556, 571, 575
Spanish-American Literature (6 units)
SPAN 557, 567, 576T

Other Electives (12 units)
Chose from 400- or 500-level courses (up to 6 of the 12 units may be taken in a related field with the approval of the adviser)
Comprehensive Exams

All students are required to complete a reading list. Upon completion of all requirements, a final evaluation by a comprehensive written examination must be taken to demonstrate mastery of the fields. The examination consists of three separate tests: Linguistics, Peninsular Literature and Spanish-American Literature. A student who fails one part of the written examination will have the option of retaking the failed part, but only one time through another written examination. The graduate committee may administer a supplemental oral examination if it deems it appropriate. If the candidate fails all or any two parts of the examination, the whole process must be repeated. The candidate may, with the approval of the graduate committee, repeat the examination, but only once within two years.

MASTER OF SCIENCE IN EDUCATION TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (33 UNITS)

Admission to Graduate Standing – Conditionally Classified

University requirements include: a baccalaureate degree from an accredited institution with a grade-point average of at least 2.7 in the last 60 semester units attempted, and good standing at the last institution attended. In addition, the candidate must have a 3.0 grade-point average in the major.

Prerequisites

1. Two years of one foreign language, or one year each of two different foreign languages or the equivalent, with an average 3.0 GPA;
2. MLNG 301, with a grade of "B-" (2.7) or better, or with program approval, the EWP with a score of 6 or better;
3. ENGL 303 with a grade of "B-" (2.7) or better;
4. one of the following – AMST 301, 345; ANTH 300, 360; CPLT 325; ENGL 300, 305, HCOM 320, or equivalent with a "B-" (2.7) or better; and
5. LING 406 with a grade of "B-" (2.7) or better.

Oral and written proficiency in English to be verified during the student’s first semester in the program. For non-native English-speaking applicants who completed their bachelor’s degrees in a language other than English, a minimum IELTS score of 7.0 overall, a minimum TOEFL score of 573 for paper-based or 89 for the iBT, and a minimum score of 50 on the Test of Spoken English or 26 on the speaking section of the iBT (to be verified no later than at the end of the student’s first semester in the program) are required.

Study Plan

The study plan must include 33 units of committee-approved coursework: 18 units of core courses, three units of language pedagogy, nine units of electives, and three units for the practicum, which includes a comprehensive examination. All TESOL students must obtain a minimum “B-” (2.7) grade in each core course and a “B” (3.0) average in all core, language pedagogy and elective courses combined.

Core Courses (18 units)

TESL 500  Fundamentals in TESOL (3)
TESL 509  Advanced Principles of TESOL: Listening/Speaking Focus (3)*
TESL 510  Advanced Principles of TESOL: Reading/Writing Focus (3)*
TESL 527  Second Language Acquisition (3)
TESL 560  Second Language Assessment (3)
TESL 595  Curriculum and Program Design for TESOL (3)

Electives (9 units)

Culture and Literature

ANTH 412, 470
CHIC 450, 480
HCOM 420, 422, 522
READ 560
TESL 511, 545
400- and 500-level adviser-approved American Studies courses
400- and 500-level adviser-approved English or American literature courses

Language and Linguistics

ANTH 416
FREN/GRMN/JAPN/SPAN 466
JAPN/SPAN 468
LING 412, 417, 442, 505, 507, 508
READ 514
SPAN 467
TESL 515, 520 or 525, if not taken as a language pedagogy course

Testing, Technology and Research

ANTH 401
EDEL 511, 515, 518A, 518B, 522, 551, 590
EDSC 504, 524, 535
LING 501
PSYC 461, 465
READ 516, 520
TESL 530, 532

*In at least one of these courses each student will complete 20 hours of service learning at one of the sites approved by the TESOL Program.
**Professional Education**

**Elementary**
EDEL 434, 500, 521, 528, 529, 530, 531, 536, 541, 542, 552, 553
READ 508

**Secondary**
EDSC 410, 522, 536, 540, 550

**Adults/College**
ENGL 402, 402S, 590
READ 507, 581

**Culminating Experience (3 units)**
TESL 596  TESOL Practicum (3)

The practicum is to be taken at the end of the program. Students must consult with an adviser the semester before the practicum. Prerequisites are TESL 500, 509, 510 and 527. The core and language pedagogy courses must be completed with an average of “B-” (2.7) or better in order for students to enroll in the practicum.

**Comprehensive Examination**
After completing all coursework, students must take a written examination covering all the courses taken in the program. An oral examination may also be required. The candidate may, with the approval of the graduate committee, repeat the examination, but only once within two years of having taken it for the first time. For further information, contact the TESOL graduate program adviser in the Department of Modern Languages and Literatures.

**ARABIC COURSES**
Courses are designated ARAB in the class schedule.

**101 Fundamental Arabic-A (5)**
Introduction to essentials of Modern Standard Arabic vocabulary and structures. Emphasis on basic reading, writing and conversational skills using culturally appropriate language. Conducted primarily in Arabic. Not for educated native speakers.

**102 Fundamental Arabic-B (5)**
Prerequisite: ARAB 101 or equivalent. Continuation of systematic introduction of fundamental vocabulary and grammatical structures of Modern Standard Arabic. Emphasis on sustained development of reading/writing and speaking skills along with considerations of Arabic culture. Conducted primarily in Arabic.

**201 Arabic for Arabic Speakers-A (3)**
Prerequisite: Basic conversation in Arabic. Intermediate course to develop communicative skills in Arabic for heritage students, based on cultural and literary materials. Reading, writing, listening and speaking in Modern Standard Arabic, as well as an introduction to colloquial Arabic Dialects. Conducted in Arabic.

**202 Arabic for Arabic Speakers-B (3)**
Prerequisite: ARAB 201 or intermediate competency in Arabic. Intermediate course to strengthen communicative skills in Arabic for heritage students based on cultural and literary materials. Reading, writing, listening and speaking in Modern Standard Arabic and several colloquial Arabic dialects. Conducted in Arabic.

**203 Intermediate Arabic-A (3)**
Prerequisites: ARAB 102 or equivalent. Instruction in listening and reading comprehension, and oral and writing practice, in Arabic based on cultural and literary materials, with further development in vocabulary and grammar. Conducted primarily in Arabic.

**299 Directed Study (1-3)**
Supervised research projects in Arabic language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

**499 Independent Study (1-3)**
Supervised research projects in Arabic language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

**CHINESE COURSES**
Courses are designated CHIN in the class schedule.

**100 Introduction to Chinese Conversation (3)**
Introduction to spoken Mandarin Chinese, with emphasis on vocabulary development, use of common phrases and sentences, and culturally appropriate language at beginning levels. Conducted primarily in Chinese.

**101 Fundamental Chinese-A (5)**
For non-native speakers of Chinese. Development of listening and reading comprehension and speaking. Introduction of writing and development of cultural awareness to communicate on a basic level. Conducted primarily in Chinese.

**102 Fundamental Chinese-B (5)**
Prerequisite: CHIN 101 or equivalent. For non-native speakers of Chinese. Continued development of listening and reading comprehension, speaking and writing to communicate on a basic level. Conducted primarily in Chinese.

**201 Mandarin Chinese for Chinese Speakers-A (3)**
Prerequisites: elementary high oral competency, able to read and write at least 500 characters or consent of the instructor. Expands learners’ oral competencies and develop their reading and writing up to 800 characters. Conducted primarily in Chinese.
202 Mandarin Chinese for Chinese Speakers-B (3)
   Prerequisites: elementary high oral competency, able to
   read and write at least 800 characters or consent of the instructor.
   Expands learners’ oral competencies and develop their reading and
   writing up to 1200 characters. Conducted primarily in Chinese.

203 Intermediate Chinese-A (5)
   Prerequisites: CHIN 102 or equivalent. Instruction in listening
   and reading comprehension, and oral and writing practice, in Chinese
   based on cultural and literary materials, with further development in
   vocabulary and grammar. Conducted primarily in Chinese.

204 Intermediate Chinese-B (5)
   Prerequisites: CHIN 203. Continued development of commu-
   nicate competence in Mandarin Chinese, focusing on listening,
   speaking, reading, and culture. Vocabulary building and
   developing grammatical accuracy. Conducted in Mandarin Chinese.

299 Directed Study (1-3)
   Supervised research projects in Chinese language, literature,
   culture, linguistics or business, to be taken with consent of instructor
   and department chair. May be repeated for credit up to a maximum
   of six units.

301 Advanced Writing in Chinese (3)
   Prerequisites: CHIN 204. Advanced levels of written expression
   through expository writing and research writing related to specific
   themes. Provides a basis of discussion, systematic study of complex
   modes of expression, and thoughtful compositions. Conducted in
   Chinese.

310 Mandarin Chinese in the Business World (3)
   Prerequisites: intermediate low competency in reading, writing
   and speaking Mandarin Chinese. (Testing may be required.) Working
   knowledge of oral and written Mandarin Chinese business language.
   Emphasizes cultural, social and economic contexts of business
   procedures; business correspondence, conversation between business

311 Mandarin Chinese for International Business (3)
   Prerequisites: intermediate middle competency in reading,
   writing and speaking of Mandarin Chinese. (Testing may be
   required.) Expand vocabulary, reading comprehension and oral and
   written analysis of materials dealing with cultural, social, economic
   and political realities in the Chinese-speaking business world. Over-
   view of the Chinese economy, major trade relations and business
   practices. Conducted in Chinese.

315 Introduction to Chinese Civilization (3)
   Prerequisites: intermediate high competency in reading,
   writing and speaking Mandarin Chinese; CHIN 202 or equivalent.
   (Testing may be required.) Social, intellectual and artistic heritage
   of Chinese civilization. Reading and discussion of characteristics of
   Chinese civilization while strengthening linguistic facility in Manda-

325 Contemporary Chinese Culture (3)
   Prerequisites: intermediate high competency in reading,
   writing and speaking Mandarin Chinese; CHIN 202 or equivalent.
   Reading and discussion to develop understanding of the social,
   political, economic and intellectual problems, trends and issues of
   present-day China while strengthening linguistic ability in Mandarin

407 Chinese Film (3)
   Prerequisite: CHIN 325. Development of contemporary
   Chinese culture, literature and society. How films are capable of ex-
   pressing social, historical, political and cultural changes. Conducted
   in Mandarin Chinese.

499 Independent Study (1-3)
   Supervised research projects in Chinese language, literature,
   culture, linguistics or business, to be taken with consent of instructor
   and department chair. May be repeated for credit up to a maximum
   of six units.

FOREIGN LANGUAGE EDUCATION COURSES

FRENCH COURSES

101 Fundamental French-A (5)
   Introduces essentials of the French language: fundamental
   vocabulary and grammatical structures. Conversational and reading/writing
   skills are equally stressed, and relevant cultural aspects are
   considered. Practice in the language laboratory required. Conducted in
   French.

102 Fundamental French-B (5)
   Prerequisite: FREN 101 or equivalent. Continues introduction
   of fundamental vocabulary and grammatical structures. Maintains
   equal emphasis on speaking and reading/writing skills, along with
   considerations of French culture. Practice in the language laboratory
   is required. Conducted in French.

203 Intermediate French-A (3)
   Prerequisite: FREN 102 or equivalent. Concurrent enrollment
   in FREN 213 recommended. Intensive practice in conversation and
   composition involving intermediate-level use of language and further
   exploration of French culture. Practice in the language laboratory
   is required. Conducted in French.
204 Intermediate French-B (3)
Prerequisite: FREN 203. Concurrent enrollment in FREN 214 recommended. Intensive review of grammatical structures; developing mastery of conversational and compositional skills at the intermediate level. Practice in the language laboratory is required. Conducted in French.

213 Intermediate Diction and Phonetics (2)
Prerequisite: FREN 102 or equivalent. Concurrent enrollment in FREN 203 recommended. Analysis of particular problems in pronunciation. Practice in accurately pronouncing cultural and literary materials. Conducted in French.

214 Intermediate Conversation and Composition (2)
Prerequisite: FREN 203. Concurrent enrollment in FREN 204 recommended. Discussion and practice in written expression based on cultural and literary materials. Conducted in French.

300 Advanced Oral Expression and Phonetics (3)
Prerequisite: FREN 204, 214 or equivalent. Developing oral control of the language through discussions, oral presentations, dialogues/ debate and further study of phonetics. Vocabulary development in areas of student concerns. Conducted in French.

307 Advanced Composition and Grammar (3)
Prerequisites: FREN 204, 214 or equivalent. Helps achieve advanced levels of oral and written expression. Literary materials provide a basis for discussions, systematic study of complex modes of expression and thoughtful compositions. Grammar emphasizes verbal structures, sequence of tenses and moods. Conducted in French.

315 Origins of Modern France (3)
Prerequisite: FREN 204, 214 or equivalent. Social, intellectual and artistic origins of French civilization: the medieval world-view transformed by the Renaissance; feudal society becoming the ancient regime. Literary selections will be read in modern French. Conducted in French.

325 Contemporary French Civilization (3)
Prerequisites: FREN 204, 214 or equivalent. Contemporary French culture organized along the lines of economics, geography, political life, social and artistic institutions. Current events are illustrated by recent documents (TV news, internet, videos, articles, films) and activities, including group presentations and debates. Conducted in French.

375 Explorations in Literature (3)
Prerequisites: FREN 204, 214 or equivalent. Promotes deeper understanding and appreciation of French literary texts. Each genre (narrative, dramatic, poetic) introduces great writers. In-depth study of selected works initiates students to critical modes of reading and tools for literacy analysis. Conducted in French.

407 French Film (3)
Prerequisite: FREN 307 or 308 or equivalent. Developing art of the French film, with special emphasis on the many roles of language. Subjects include: montage, visual/verbal meaning, literary/ cinematic narrative, non-realistic language, read language, non-narrative continuity. Conducted in English.

408 Advanced Writing: Syntax and Morphology (3)
Prerequisite: FREN 307 or 308 or equivalent. Mastery of forms and structure of the French language. Analysis and guided composition of various styles of discourse. Detailed study of mood, sequence of tenses, voice, aspects and nuances of meaning. Conducted in French.

409 Techniques of French-English Translation (3)
Prerequisite: FREN 307 or 308 or equivalent. Overview of theories of translation; examination of several types and examples of translation (technical to literary). Major emphasis on actual translation from English to French and French to English.

415 French Classicism (3)
Prerequisites: FREN 307, 375. Decisive moment in French experience. Focuses on literature of the Classic period (1660-1685), but open at both ends to include the formation and perenniality of French Classicism. Conducted in French.

425 French Romanticism (3)
Prerequisites: FREN 307, 375. Revolution in feeling and intellect in 19th-century France. The Romantic period (1820-1850). May include material preceding or following those dates. Conducted in French.
435T Topics in French/ Francophone Culture (3)
Prerequisites: FREN 307 or 308 and 325 or equivalent. Different "texts" (cinema, the media, internet, literature, art) centered around cultural topics (e.g., “City and Country,” “The Outsider”). Tools to understand French-speaking culture(s), from recent social issues to classic art and literature. Course may be taken up to three times with a different topic. Conducted in French.

466 Introduction to French Linguistics (3)
Prerequisite: FREN 307 or 308. Analytical procedures of general linguistics applied to French. Structural contrasts between French and English. Application of linguistic analysis to the teaching of modern foreign languages. Conducted in French.

470 French Literature and Power (3)
Prerequisites: FREN 307 or 308 and 375 or equivalent. Socio-political dimensions of French literature throughout its history. Expressions of alliance with, or resistance to, the established political order will be studied from the medieval epic through 20th century literary texts. Conducted in French.

471 Literature and the Human Psyche (3)
Prerequisites: FREN 307 or 308, and 375 or equivalent. Psychological explorations in French literature through texts that provide insights into the human psyche and shape our notion of the self at different moments of French cultural history. A variety of works will be studied, from the Renaissance through the 20th century. Conducted in French.

472 Philosophical Exploration in Literature (3)
Prerequisites: FREN 307 or 308 and 375 or equivalent. Philosophical dimensions of French literature throughout its history. Interrogations about the human condition, and the role and place of human consciousness in the universe will be guiding theme in texts ranging from the Renaissance through the 20th century. Conducted in French.

475 Seminar in 20th-Century French Literature (3)

485 Senior Seminar in French Studies (3)
Prerequisites: FREN 307, 315, 325, 375; and 470, 471 or 472. Students develop individualized research projects to integrate and expand knowledge and skills. Analyze and synthesize, debate, and evaluate their own and other students’ projects on social, literary, linguistic, cultural, and/or philosophical issues related to the French-speaking world. May be repeated for credit with different topic.

499 Independent Study (1-3)
Supervised projects in French language, linguistics, culture or literature. Consent of the instructor and department chair required. May be repeated for credit.

500 Graduate Seminar: Advanced Structure and Style (3)
Prerequisite: graduate standing. Comparative analysis of English and French linguistic structures systematically applied in exercises and translations; and analysis of style in French with discussion of styles in a variety of literary and non-literary texts. Conducted in French.

520 Graduate Seminar: Old French (3)
Prerequisite: graduate standing. Readings in the medieval literature of northern France. A variety of dialects and centuries. Conducted in French.

530 Graduate Seminar: Historical Linguistics (3)
Prerequisite: FREN 466. Some previous study of Latin recommended. Introduction to the principles of historical linguistics. Transformation of classical Latin (phonology, morphology, syntax and lexicon) into contemporary French. Conducted in French.

557 Graduate Seminar: French Poetry (3)
Prerequisite: graduate standing. Poetry of French expression that focuses on specific poets or poetic movements while situating them in their historical context. Various critical strategies may be used to analyze the selected works. Conducted in French.

571 Graduate Seminar: French Prose (3)
Prerequisite: graduate standing. Narrative genre in French focusing on specific texts or movements while situating them in their historical context. Various critical strategies may be used to analyze these texts. Conducted in French.

575 Graduate Seminar: French Drama (3)
Prerequisite: graduate standing. Chronological overview of French drama. Treats, in each period, relationships between society, dramatic and theatrical forms, typical thematic content of plays, and the social role of theater. Conducted in French.

576T Graduate Seminar: Major Writers (3)
Prerequisite: graduate standing. May be repeated for credit. Conducted in French.

579 Francophone Literature (3)
Prerequisite: graduate standing. Francophone literatures (Quebec, West Indies, Meghreb and black Africa) since the 1950s. Linguistic, artistic and socio-political issues raised in the literature of these ex-colonies. Conducted in French.

598 Thesis (3-6)
Prerequisite: recommendation of student’s graduate committee.

599 Independent Graduate Research (1-3)
Prerequisites: fluency in French, graduate standing, and consent of instructor. Supervised research projects in French language, linguistics, culture or literature. May be repeated for credit.
GERMAN COURSES

Courses are designated GRMN in the class schedule.

101 Fundamental German-A (5)
Develop listening and reading comprehension, speaking and cultural awareness to communicate on a basic level. Introduction to customs and culture of German-speaking countries. Conducted primarily in German.

102 Fundamental German-B (5)
Prerequisite: GRMN 101 or equivalent. Continued development of listening and reading comprehension, speaking, writing and cultural awareness to communicate on a basic level. Further study of customs and culture of German-speaking countries. Conducted primarily in German.

203 Intermediate German-A (3)
Prerequisite: GRMN 102 or equivalent. Develop listening comprehension and speaking. Vocabulary building and developing conversational skills. Conducted in German. May be taken concurrently with GRMN 204, 213 or 214.

204 Intermediate German-B (3)
Prerequisite: GRMN 102 or equivalent. Develop listening and reading comprehension and writing. Vocabulary building and developing writing competency. Conducted in German. May be taken concurrently with GRMN 203, 213 or 214.

213 Intermediate Reading-A (2)
Prerequisite: GRMN 102 or equivalent. Develop reading comprehension using edited and basic authentic materials. May be taken concurrently with GRMN 203 or 204. Conducted in German.

214 Intermediate Reading-B (2)
Prerequisite: GRMN 213 or equivalent. Continued refinement of reading comprehension based on authentic materials. May be taken concurrently with GRMN 203 or 204. Conducted in German.

299 Directed Study (1-3)
Prerequisite: consent of instructor and department chair. Supervised study projects in the German language. May be repeated for credit.

300 German Conversation (3)
Prerequisites: GRMN 204 or equivalent and intermediate competency. Open to lower-division students with consent of instructor. Develop oral competencies in the context of students’ own or contemporary concerns. Conducted in German.

305 Advanced Conversation and Composition (3)
Prerequisites: GRMN 204 or equivalent and intermediate competency. Open to lower-division students with consent of instructor. Free oral and written expression. Conducted in German.

310 German in the Business World (3)
Prerequisites: GRMN 203, 204, 213, 214 or equivalent and intermediate competency. Working knowledge of business language in the German-speaking world. Business correspondence, conversation between business partners and the language of advertising. Conducted in German.

311 German for International Business (3)
Prerequisites: GRMN 203, 204, 213, 214 or equivalent and intermediate competency. GRMN 310 recommended. Expands reading comprehension through authentic texts and on building vocabulary of the German business world, and overview of the German economy and business practices. Conducted in German.

315 Introduction to German Civilization (3)
Prerequisites: GRMN 204 or equivalent and intermediate competency. Readings and discussions in German literature, arts and institutions to develop insights into German culture. Conducted in German.

325 Current Trends in Culture of German-Speaking Peoples (3)
Prerequisites: GRMN 204 or equivalent and intermediate competency. Readings and discussion of German contributions to present-day civilization while strengthening facility with German language. Conducted in German.

335 Introduction to Literature (3)
Prerequisites: GRMN 305 and advanced competency. Introduction to the art of literature in a cultural context. Analyze and interpret various texts. Conducted in German.

399 German Phonetics (3)
Prerequisite: intermediate competency. Analysis of students’ pronunciation and intensive practice of phonetic patterns, including intonation. Develop conversational competency. May be repeated for credit; but may count only once toward German major.

400 Advanced Conversation Practice and Vocabulary Expansion (3)
Prerequisite: GRMN 305. Intensive oral practice with emphasis on vocabulary expansion. Conducted in German.

405 Advanced Writing and Speaking (3)
Prerequisite: GRMN 305. Practice writing on various topics in detail, expressing hypotheses and presenting arguments or points of view accurately and effectively. Development differences of formal and informal style. Conducted in German.

430 German Literature and Culture to the Baroque (3)
Prerequisites: GRMN 305, 315, 335. Masterpieces of German literature from the Hildebrandslied to Der Abenteuerliche Simplissimus and their relationship to cultural, historical and intellectual developments between ca. 800-1670 A.D. Conducted in German.
450 19th-Century German Literature and Culture (3)
Prerequisites: GRMN 305, 315, 335. 19th-century German literature from Romanticism to Naturalism. Decisive philosophic, political and economic influences. Conducted in German.

460 20th-Century German Literature and Culture (3)
Prerequisites: GRMN 305, 315, 335. Major German prose, drama and poetry of the 20th century. Conducted in German.

466 Introduction to German Linguistics (3)
Prerequisite: GRMN 305. Analytical procedures of general linguistics as applied to German. Structural contrasts between German and English. Application of linguistic analysis to the teaching of modern foreign languages.

482 German Literature and Culture in Film (3)
Prerequisite: advanced standing in literature. Literary works and their film adaptations, as well as a critical analysis of film as communication. May be repeated for credit with different film syllabus.

485T Senior Seminar in German Literature (3)
Prerequisite: senior standing in German. Research and discussion of a literary movement, genre or author. Subject varies and is announced in the class schedule. May be repeated for credit with different topic. Conducted in German.

499 Independent Study (1-3)
Supervised research projects in German language or literature to be taken only with consent of instructor and department chair. May be repeated for credit.

500 Graduate Seminar: Advanced Structure and Style (3)
Prerequisite: consent of instructor. Comparative, rhetorical analysis of German and English linguistic structures systematically applied in exercises and translations. Varieties of writing styles by analyzing literary as well as non-literary texts. Conducted in German.

530 Graduate Seminar: Historical Linguistics (3)
Prerequisites: GRMN 466 and consent of instructor. Introduction to the principles of historical linguistics. Development of German from Indo-European to contemporary German by examining phonological, morphological and syntactical changes through the centuries. Conducted in German.

571T Graduate Seminar: German Literature (3)
Prerequisite: consent of instructor. Various genres in German that focus on specific texts or movements within a cultural context. May be repeated for credit with a different topic. Conducted in German.

598 Thesis (3-6)
Prerequisite: recommendation of student’s graduate committee.

599 Independent Graduate Research (1-3)
Prerequisites: advanced competency and consent of instructor. Supervised research projects in German language or literature. May be repeated for credit.

ITALIAN COURSES
Courses are designated ITAL in the class schedule

101 Fundamental Italian-A (5)
Develop listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level with a focus on oral expression. Introduction to Italian customs, culture and civilization. Conducted primarily in Italian.

102 Fundamental Italian-B (5)
Prerequisite: ITAL 101 or equivalent. Continued development of listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level with an emphasis on oral expression. Further study of Italian customs, culture and civilization. Conducted primarily in Italian.

203 Intermediate Italian-A (3)
Prerequisite: ITAL 102 or equivalent. Listening and reading comprehension, and oral and writing practice in Italian. Introduction to Italian customs, culture and civilization.

299 Directed Study (1-3)
Supervised research projects in Italian language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

499 Independent Study (1-3)
Supervised research projects in Italian language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

JAPANESE COURSES
Courses are designated JAPN in the class schedule.

100 Japanese Conversation for Beginners (3)
Introduction to spoken Japanese, with emphasis on vocabulary development at the beginning levels. For students who would like to learn conversational Japanese without having to learn the writing system.

101 Fundamental Japanese-A (5)
Develop listening and reading comprehension, speaking, writing and cultural awareness to communicate on a basic level. Introduction to Japanese customs, culture and civilization.

102 Fundamental Japanese-B (5)
Prerequisite: JAPN 101 or equivalent. Continued development of listening and reading comprehension, speaking, writing and cultural awareness to communicate on a basic level. Further study of Japanese customs, culture and civilization.
203 Intermediate Japanese-A (5)  
Prerequisite: JAPN 102 or equivalent. Develop listening and reading comprehension, and oral and written practice in Japanese based on cultural and literary materials. Review of grammar. Conducted primarily in Japanese.

204 Intermediate Japanese-B (5)  

299 Directed Study (1-3)  
Prerequisite: JAPN 102 or equivalent. Supervised study projects in Japanese language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

305 Advanced Japanese-A (3)  
Prerequisite: JAPN 204 or equivalent. Practice in four skills of advanced Japanese emphasizing reading comprehension in the context of contemporary concerns. Conducted in Japanese.

306 Advanced Japanese-B (3)  
Prerequisite: JAPN 204 or equivalent. Practice in four skills of advanced Japanese emphasizing reading comprehension in the context of contemporary concerns. Conducted in Japanese.

307 Advanced Spoken Japanese (3)  
Prerequisite: JAPN 204 or equivalent. Spoken aspect of advanced Japanese through dialogues, discussions and oral presentations in the context of contemporary concerns. Conducted in Japanese.

308 Advanced Writing in Japanese (3)  
Prerequisite: JAPN 204 or consent of instructor. Advanced level of written expression in Japanese and cultural awareness through reading and writing on various topics. Further development of writing skills in Japanese using “kyoiku-kanji” with accurate grammar.

310 Japanese for Business (3)  
Prerequisite: JAPN 204. Practical vocabulary and structure of business language, as well as the cultural background of business procedures in the Japanese business world. Conducted in Japanese.

311 Japanese for International Business (3)  

315 Introduction to Japanese Civilization (3)  
Prerequisite: JAPN 204 or equivalent. Readings and lectures in Japanese literature, arts and institutions from earliest history to 1868, to develop insights into Japanese culture while strengthening facility in the language. Conducted primarily in Japanese.

316 Modern Japan (3)  
Prerequisites: JAPN 204, 315. Readings and lectures in Japanese literature, arts and institutions from 1868 to the present, to develop insights into Japanese culture while strengthening facility in the language. Conducted primarily in Japanese.

375 Introduction to Literary Forms (3)  

390 Japanese Culture and Society: Anime (3)  
Prerequisite: completion of General Education Category C.2. Japanese culture and society, as well as multicultural analysis of global issues as reflected in Japanese animated films. Conducted in English.

420 Medieval Japanese Literature (3)  
Prerequisite: JAPN 375. Masterpieces of Japanese literature from eighth to 16th centuries and their relationship to cultural, historical and intellectual developments in these eras. Conducted primarily in Japanese.

440 Introduction to Modern Japanese Literature (3)  
Prerequisite: JAPN 375. Literary use of language, literary creation, reading and critical evaluation of literary works. Reading excerpts of modern Japanese literary works on various topics. Conducted primarily in Japanese.

450 Japanese Culture and Society in Film (3)  
Prerequisite: at least one class from JAPN 305 – 308. Development of modern Japanese culture and society using film that reflects important Japanese cultural and social concepts, and ways of looking at and dealing with the world. Conducted primarily in Japanese.

466 Introduction to Japanese Linguistics (3)  
Prerequisite: JAPN 306 or equivalent. Analytical procedures of general linguistics as applied to phonological, semantic, morphological, syntactic and discourse aspects of Japanese. Conducted primarily in Japanese.

468 Japanese-English Contrastive Analysis (3)  
Prerequisites: JAPN 306, 466 (may be taken concurrently) or equivalent. Contrastive analysis of phonological, lexical, syntactic and discourse aspects of Japanese and English. Conducted primarily in Japanese.

485T Senior Seminar: Variable Topics in Japanese (3)  
Prerequisites: JAPN 205 or 306 and at least one 400-level course in Japanese. Research and discussion of a cultural, literary or linguistic theme. Subject varies and is announced in the class schedule. May be repeated for credit with a different topic. Conducted primarily in Japanese.

499 Independent Study (1-3)  
Supervised projects in Japanese language or literature to be taken with consent of instructor and department chair. May be repeated for credit.
KOREAN COURSES

Courses are designated KORE in the class schedule.

101 Fundamental Korean-A (5)
Develop listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level. Introduction to Korean customs, culture and civilization. Conducted primarily in Korean.

102 Fundamental Korean-B (5)
Prerequisite: KORE 101 or equivalent. Continued development of listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level. Further study of Korean customs, culture and civilization. Conducted primarily in Korean.

203 Intermediate Korean-A (3)
Prerequisite: KORE 102 or equivalent. listening and reading comprehension, as well as oral and writing competence in Korean involving intermediate level language based on cultural materials with further exploration of Korean culture. Conducted primarily in Korean.

299 Directed Study (1-3)
Supervised research projects in Korean language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

499 Independent Study (1-3)
Supervised research projects in Korean language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

MODERN LANGUAGE COURSES

Courses are designated as MLNG in the class schedule.

196 Student-to-Student Tutorials (1-3)
(See index)

301 Writing in an Intercultural Context (3)
Prerequisite: 315, 316 or 325 in the appropriate language major. Expository writing and research writing related to intercultural themes. Meets the classroom portion of the upper-division writing requirement for foreign language majors.

495 Internship in Foreign Languages (3)
Prerequisites: the 310 and 311 courses in the appropriate language and consent of instructor. Supervised field experience in multinational businesses locally or abroad. Daily use of a foreign language on the job and concurrent enrollment in a Mihaylo College of Business and Economics internship are required. Credit/No Credit Course.

496 Student-to-Student Tutorials (1-3)
(See index)

PERSIAN COURSES

Courses are designated PERS in the class schedule.

101 Fundamental Persian-A (5)
Develop listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level. Included is an introduction to Persian customs, cultures and civilization. Conducted primarily in Persian.

102 Fundamental Persian-B (5)
Prerequisite: PERS 101 or equivalent. Continued development of listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level. Further study of Persian customs, cultures and civilization. Conducted primarily in Persian.

201 Persian for Persian Speakers-A (3)
Prerequisite: basic conversation in Persian. Intermediate course to strengthen existing communicative skills and cultural knowledge in Persian. Oral expression, vocabulary expansion, grammar and specifically, reading and writing. Conducted mainly in Persian.

202 Persian for Persian Speakers-B (3)
Prerequisite: PERS 201 or intermediate native fluency in Persian. Strengthens existing communicative skills and cultural knowledge developed in PERS 201. Oral expression, vocabulary building, spelling, grammar, composition and specifically, reading and writing. Conducted in Persian.

203 Intermediate Persian-A (3)
Prerequisite: PERS 102 or equivalent. Continued development of listening and reading comprehension, speaking and writing, and cultural awareness using intermediate level language based on cultural materials. Conducted primarily in Persian.

299 Directed Study (1-3)
Supervised research projects in Persian language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

300 Persian Conversation (3)
Prerequisites: PERS 202, 204 or equivalent. Develop oral competency through reading response, discussions, oral presentations and debates. Vocabulary development in areas of student concerns. Conducted in Persian

305 Advanced Persian-A (3)
Prerequisite: PERS 204 or 300. Advanced levels of oral and written expression. Reading materials provide a basis for discussions, systematic modes of complex expression and compositions. Conducted in Persian.
306 Advanced Persian-B (3)
Prerequisite: PERS 305. Advance levels of oral and written expression focusing on reading comprehension, listening comprehension and writing advanced essays. Reading materials provide basis for discussions. Conducted in Persian.

499 Independent Study (1-3)
Supervised research projects in Persian language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

PORTUGUESE COURSES
Courses are designated PORT in the class schedule.

101 Fundamental Portuguese-A (4)
Prerequisite: prior successful study of another Romance language. Develop listening and reading comprehension, speaking, writing and cultural awareness to communicate on a basic level. Included is an introduction to customs, culture, and civilization of Portuguese-speaking countries. Conducted in Portuguese.

102 Fundamental Portuguese-B (4)
Prerequisite: PORT 101 or equivalent. Continued development of listening and reading comprehension, speaking, writing and cultural awareness to communicate on a basic level. Further study of customs, culture and civilization of Portuguese-speaking countries. Conducted in Portuguese.

310 Portuguese in the Business World (3)
Prerequisites: PORT 101 or equivalent. Intensive course to develop listening and reading comprehension, speaking, writing and cultural awareness necessary to communicate on a basic level. Conducted in Portuguese.

317 Advanced Conversation and Composition (3)
Prerequisite: PORT 102 or equivalent. Free oral and written expression. Conducted in Portuguese.

320 Introduction to Luso-Brazilian Culture and Civilization (3)
Prerequisites: PORT 310, 317 or equivalent, good reading knowledge of Portuguese. Main currents of Portuguese culture and civilization and Brazil's intellectual and artistic development from discovery to independence. Conducted in Portuguese.

325 Contemporary Brazilian Civilization (3)
Prerequisite: PORT 310, 317 or equivalent. Readings and discussion to develop understanding of the social and intellectual problems, trends and contributions to Brazil since independence. Present-day Brazil. Conducted in Portuguese.

499 Independent Study (1-3)
Supervised projects in Portuguese language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

SPANISH COURSES
Courses are designated SPAN in the class schedule.

101 Fundamental Spanish-A (5)
Prerequisite: prior successful study of another Romance language. Develop listening and reading comprehension, speaking, writing and cultural awareness to communicate on a basic level. Introduction to customs, culture and civilization of Spanish-speaking countries. Conducted primarily in Spanish.

102 Fundamental Spanish-B (5)
Prerequisite: SPAN 101 or equivalent. Continued development of listening and reading comprehension, speaking, writing and cultural awareness to communicate on a basic level. Introduction to customs, culture and civilization of Spanish-speaking countries. Conducted primarily in Spanish.

105 Intensive Review of Fundamental Spanish (5)
Prerequisite: prior experience equivalent to SPAN 101, 102 or three years of high school Spanish taken two or more years ago. Intensive course to develop listening and reading comprehension, speaking, writing and cultural awareness necessary to communicate on a basic level. Conducted primarily in Spanish.

202 Spanish for Spanish Speakers (3)
Prerequisite: consent of instructor. Intermediate course to further develop existing communicative skills in Spanish. Students may not receive credit for both SPAN 202 and 204 Conducted in Spanish.

203 Intermediate Spanish-A (3)
Prerequisite: SPAN 102, 105 or equivalent. Concurrent enrollment in SPAN 213 recommended. Develop listening and reading comprehension, speaking and writing Spanish based on cultural and literary materials. Oral expression and developing correct pronunciation. Conducted in Spanish.

204 Intermediate Spanish-B (3)
Prerequisite: SPAN 201, 203 or equivalent. Concurrent enrollment in SPAN 214 recommended. Continued development of listening and reading comprehension, practice in speaking and writing Spanish based on cultural and literary materials. Emphasizes vocabulary building and developing grammatical accuracy. Conducted in Spanish.

213 Intermediate Conversation (3)
Prerequisite: SPAN 102, 105 or equivalent. Concurrent enrollment in SPAN 203 recommended. Practice in oral expression. Not open to students with proficiency in Spanish. Conducted in Spanish.

214 Intermediate Composition (3)
Prerequisite: SPAN 201, 203 or equivalent. Concurrent enrollment in SPAN 204 recommended. Practice in written expression based on cultural and literary materials. Conducted in Spanish.
299 Directed Study (1-3)
Prerequisite: SPAN 102 or equivalent. Supervised study projects in Spanish language or literature to be taken with consent of instructor and department chair. May be repeated for credit.

300 Advanced Conversation and Formal Speech (3)
Prerequisite: SPAN 204 or 213. Develop formal, as well as conversational control of spoken Spanish in the context of contemporary cultural topics related to the Spanish-speaking world. Not open to those with native-like proficiency in Spanish. Conducted in Spanish.

301 Advanced Grammar and Composition (3)
Prerequisites: SPAN 214 or equivalent. Grammar analysis and written expression. Conducted in Spanish.

310 Spanish in the Business World (3)
Pre- or corequisites: SPAN 301, ECON 201, 202. Practical vocabulary and structure of business language, as well as the cultural background of business procedures in the Hispanic world. No credit toward Spanish major or minor. Conducted in Spanish.

311 Spanish for International Business (3)
Prerequisite: SPAN 310. Acquisition of vocabulary appropriate to the Hispanic business world and study of its economic institutions. Reading comprehension, conversation and composition. No credit toward Spanish major or minor. Conducted in Spanish.

315 Introduction to Spanish Civilization (3)
Pre- or corequisite: SPAN 301. Readings and discussions in Spanish literature, arts and institutions. Strengthening of facility in the language. Conducted in Spanish.

316 Introduction to Spanish-American Civilization (3)

375 Introduction to Literary Forms (3)
Prerequisite: SPAN 301 or equivalent. Introduction to literary forms and concepts of literary techniques and criticism. Analysis and interpretation of various texts. Strengthens abilities in reading, language and literary criticism. Conducted in Spanish.

390 Spanish Culture Through Cinema and Literature (3)
Prerequisite: completion of General Education Category C.2. Development of modern Spanish society (20th century) using various visual media including literature (in translation) and film (subtitled). Conducted in English.

400 Advanced Writing (3)
Pre- or corequisite: SPAN 375. Explore a topic or theme to develop several language skills, especially writing, to broaden and deepen cultural awareness from a humanistic perspective, and to develop and refine critical, analytical, and creative writing competencies. Conducted in Spanish.

407 Spanish Visual Representations of Cultural Transformations in the 20th Century (3)
Prerequisite: SPAN 315. Development of modern Spanish society from the Second Republic of 1930 to 1983’s democracy. How films are texts capable of expressing social, historical or political issues and cultural changes. Conducted in Spanish.

408 Mystic Influences on Spanish Peninsular Literature (3)
Prerequisites: SPAN 375, 400. Influence of three great religions – Judaism, Christianity, Islam – and the mystic expressions of these religions on Spanish authors and thinkers from 1500 to 2000, using literary texts. Conducted in Spanish.

415 Contemporary Spanish Culture (3)
Prerequisite: SPAN 315. Cultural-social, economical, politico-characteristics of contemporary Spanish life. Conducted in Spanish. Not applicable for graduate degree credit.

416 Contemporary Spanish-American Culture (3)
Prerequisite: SPAN 316. Social, economic, artistic and political aspects of contemporary life in Spanish America. Conducted in Spanish. Not applicable for graduate degree credit.

430 Spanish Literature to Neoclassicism (3)
Prerequisites: SPAN 315, 375. Spanish literature from its beginnings to 1700. Representative works of each genre. Conducted in Spanish.

440 Spanish-American Literature to Modernismo (3)
Prerequisites: SPAN 316, 375. Spanish-American literature to modernismo. Conducted in Spanish.

441 Spanish-American Literature Since Modernismo (3)
Prerequisites: SPAN 316, 375. Spanish-American literature from modernismo to the present. Conducted in Spanish.

461 Spanish Literature Since Neoclassicism (3)
Prerequisites: SPAN 316, 375. Spanish literature from its beginnings to 1700. Representative works of each genre. Conducted in Spanish.

466 Spanish Phonology and Dialectology (3)
Prerequisite: SPAN 301 or equivalent. Descriptive study of the phonology of Spanish, with specific focus on the sound system, suprasegmentals and connected speech. Description and analysis of the dialectal varieties of Spanish. Conducted in Spanish.

467 Spanish Morphology and Syntax (3)
Prerequisite: SPAN 301 or equivalent. Analytical procedures of general linguistics as applied to Spanish word and sentence structure. Conducted in Spanish.

468 Spanish/English Bilingualism and Language Contact (3)
Prerequisite: SPAN 467. Topics related to Spanish-English Bilingualism and language contact. Linguistic situation of the Hispanic groups in the United States within psycholinguistic, grammatical and sociolinguistic theoretical frames. Conducted in Spanish.
475T Senior Seminar: Topics in Spanish Peninsular Literature (3)
Prerequisites: SPAN 375 and senior standing in Spanish.
Selected topics of the literature of Spain. Subject matter will change.
May be repeated for credit. Conducted in Spanish.

485T Senior Seminar: Topics in Spanish-American Literature (3)
Prerequisites: SPAN 375 and senior standing in Spanish.
Selected topics of the literature of Spanish-America. Subject matter will change.
May be repeated for credit. Conducted in Spanish.

499 Independent Study (1-3)
Supervised research projects in Spanish language, literature, culture, linguistics or business to be taken with consent of instructor and department chair. May be repeated for credit.

500 Graduate Seminar: Advanced Structure and Style (3)
Prerequisite: SPAN 467 or equivalent. Transformational analysis of Spanish syntactic structures; classic approach to grammar; and analysis of style in different contemporary writers, following a linguistic approach. Complemented with exercises and translations from English to Spanish. Conducted in Spanish.

509 Advanced Principles of TESOL: Listening/Speaking Focus (3)
Prerequisites: one of the following: FREN, GRMN, JAPN 466 or SPAN 466 or 467 or LING 406; TESL 500. Theories, methods and procedures for teaching listening and speaking skills to second language learners. Planning and delivery of communicative ESL/EFL lessons.

510 Advanced Principles of TESOL: Reading/Writing Focus (3)
Prerequisites: one of the following: FREN, GRMN, JAPN 466 or SPAN 466 or 467 or LING 406; TESL 500. Theories, methods and procedures for teaching functional and academic reading and writing skills to second language learners. Planning and delivery of content-based ESL/EFL lessons.

511 Teaching English Abroad (3)
Prerequisite: TESL 500. Prepares students to understand the cultural and socio-political significance of teaching English outside the U.S. Methods, techniques, materials, classroom management and evaluation in programs abroad. Create or adapt materials for a selected country or region.

515 Pedagogical Grammar in TESOL (3)
Prerequisites: ENGL 303, LING 406, TESL 500. Systematic approach to the theories and practical aspects of teaching grammar to non-native speakers of English within a communicative framework. Ordering, selecting and preparing appropriate materials and activities. Expands on concepts introduced in TESL 500.

576T Graduate Seminar: Hispanic Topics (3)
Prerequisite: SPAN 430, 440, 441 or equivalent. May be repeated for credit with different subject matter. Topics include: Contemporary Spanish Culture, Contemporary Spanish-American Culture, El Ensayo y La Critica Literaria Hispano-Americana. Conducted in Spanish.

598 Thesis (3-6)
Prerequisite: recommendation of student's graduate committee.

599 Independent Graduate Research (1-3)
Prerequisites: fluency in Spanish and consent of instructor.
Supervised research projects in Spanish language or literature. May be repeated for credit.

TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL) COURSES
Courses are designated as TESL in the class schedule.

500 Fundamentals in TESOL (formerly 400) (3)
Prerequisites: completion of or concurrent enrollment in ENGL 303, LING 406. Prepares students for coursework offered in the M.S. TESOL and TESOL Certificate Programs and for careers in TESOL. Teacher trainees learn requisite skills for teaching ESL/EFL classes at all levels of instruction and to be professionals in the field.

556 Graduate Seminar: Spanish Poetry (3)
Prerequisite: SPAN 430, 461 or equivalent. Chronological overview of Peninsular poetry with special attention on specific authors and movements. Conducted in Spanish.

557 Graduate Seminar: Spanish-American Poetry (3)
Prerequisite: SPAN 440, 441 or equivalent. Chronological overview of Spanish-American poetry from 1888 (Latin American Modernism) to Vanguardist and present day poetry and "Anti-Poetry." Conducted in Spanish.

558 Graduate Seminar: Spanish-American Novel (3)
Prerequisite: SPAN 440, 441 or equivalent. Historical overview of the development of the Spanish-American novel from the Colonial period (picaresque) to the Modern Experimental Novel. Conducted in Spanish.

571 Graduate Seminar: Spanish Prose and Narrative Fiction (3)
Prerequisite: SPAN 430, 461 or equivalent. Major prose and narrative works from various historical periods of Spanish literature. Conducted in Spanish.
520 Teaching Pronunciation and Oral Discourse in TESOL (3)
Prerequisites: ENGL 303, LING 406, TESL 500. Prepares teacher trainees with a working knowledge of phonological and oral discourse terms and concepts; and explores strategies for designing and teaching ESL/EFL lessons that include attention to oral communication and pronunciation enhancement.

525 Teaching Vocabulary in the ESL/EFL Classroom (3)
Prerequisite: TESL 500. Complexities of vocabulary knowledge and the linguistic and cultural aspects of vocabulary learning. Applies theories and research findings to the classroom. Instruction in contextualized vocabulary learning and appropriate dictionary use.

527 Second Language Acquisition (3)
Prerequisites: FREN, JAPN or GRMN 466; or SPAN 466 or 467; or LING 406; TESL 500. Methodology for research in second language acquisition and development; socio-linguistic and psycholinguistic patterns in bilingualism; interactions of language and culture in the language acquisition process.

530 Research Methods for TESOL and Applied Linguistics (3)
Prerequisite: TESL 500 or concurrent enrollment. Basic familiarity with aspects of research design, and developing an understanding of quantitative and qualitative research methods. Training in becoming more effective consumers of research, and in conducting original empirical research.

532 Technology in Second Language Learning (3)
Prerequisites: TESL 500, FLED 442 or valid teaching credential. Key concepts and issues in educational technology relevant to teaching second languages. Theories, practices and equipment currently used. Uses of computers, the internet, videos, etc.

545 Teaching Culture in the Language Classroom (3)
Prerequisites: TESL 500. Framework for teaching culture and value systems in the second language classroom. Teaching patterns of culture, methods of cultural comparison, audio-visual materials and textbook evaluation.

560 Second Language Assessment (3)
Prerequisites: TESL 509, 510. Theories, issues, basic statistical concepts in second language testing and techniques for second language assessment. Practice in analyzing commercial language tests and in constructing tests for classroom use.

595 Curriculum and Program Design for TESOL (3)
Prerequisites: TESL 500, 509, 510. Approaches for curriculum planning in TESOL. Needs assessment, goal setting, syllabus design and program evaluation. Students will produce projects for a specific group and setting.

596 TESOL Practicum (3)
Prerequisites: completion of the appropriate program core courses (TESOL Certificate or M.S. Education-TESOL) and consent of instructor or adviser. Teaching English to speakers of other languages at Cal State Fullerton or in other schools. Supervised by instructor and supervisors. Seminar meetings by arrangement. May be repeated for credit.

599 Independent Graduate Research (1-3)
Prerequisites: graduate standing and consent of instructor. Supervised research projects in teaching English to speakers of other languages (TESOL). May be repeated for credit.

VIETNAMESE COURSES
Courses are designated VIET in the class schedule.

101 Fundamental Vietnamese A (5)
Prerequisite: VIET 101 or equivalent. Develop listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level, with a focus on oral expression. Introduction to Vietnamese customs, culture and civilization. Conducted primarily in Vietnamese.

102 Fundamental Vietnamese B (5)
Prerequisite: VIET 101 or equivalent. Continued development of listening and reading comprehension, speaking and writing, and cultural awareness to communicate on a basic level. Further study of Vietnamese customs, culture and civilization. Conducted primarily in Vietnamese.

201 Vietnamese for Vietnamese Speakers-A (3)
Prerequisite: student must be able to sustain conversation; Consent of instructor. Intermediate course to develop communication through reading and writing and to improve oral communication.

202 Vietnamese for Vietnamese Speakers-B (3)
Prerequisite: advanced speaking competency. Develop reading/writing skills. A broad range of topics are studied and students write articles and letters, as well as essays and reports on cross-cultural topics.

203 Intermediate Vietnamese-A (3)
Prerequisite: VIET 102 or equivalent. Listening and reading comprehension, and oral and writing competence in Vietnamese involving intermediate level language based on cultural materials, with further exploration of Vietnamese culture. Conducted primarily in Vietnamese.

204 Intermediate Vietnamese B (3)
Prerequisite: VIET 203. Continued development of communicative competence in Vietnamese with a focus on listening, speaking, reading, writing and culture at the intermediate level. Building vocabulary and developing grammatical accuracy. Conducted primarily in Vietnamese.
299 Directed Study (1-3)
Supervised research projects in Vietnamese language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.

305 Advanced Vietnamese A (3)
Prerequisite: Vietnamese competency or VIET 204. Continued development of communicative competency in Vietnamese with a focus on listening, speaking, reading, writing and culture at the advanced level. Building vocabulary and strengthening grammatical accuracy. Conducted in Vietnamese.

499 Independent Study (1-3)
Supervised research projects in Vietnamese language, literature, culture, linguistics or business, to be taken with consent of instructor and department chair. May be repeated for credit up to a maximum of six units.
INTRODUCTION

The faculty and students in the Department of Music share a deep passion for and common desire to achieve excellence in music. The department offers a wide spectrum of degree programs and options with an overall emphasis in musical performance. The curriculum provides basic preparation for careers in music, music education or further graduate study, and is designed to provide a balanced education in the many facets of musical experience. Artist-teachers offer instruction in all aspects of performance; practicing composers and theorists teach courses in theory and composition; active musicologists provide instruction in history and literature; and specialists in music education teach the courses in that field. It is the goal of the department to develop each student’s musical and intellectual potential to the highest level of individual capability. California State University, Fullerton has been fully and continuously accredited by the National Association of Schools of Music since 1966.

LEARNING GOALS AND STUDENT LEARNING OUTCOMES

Bachelor of Arts in Music

The following learning goals and outcomes have been established for students pursuing a bachelor of arts degree in Music:

**Musical Practitioners**
- Be competent and reflective practitioners of the art of music through performance, composition, analysis, and reflection
- Be passionate and confident about their work through successful performance
- Practice successful collaboration through work on concert and recital performance and production

**Musical Scholars**
- Be intellectually curious and decisive in exploring new avenues of expression
- Exercise professional standards of oral and written communication
- Have a basic knowledge of music history, literature and theory
- Have well-rounded educational backgrounds acquired through studies in general education courses

**Lifelong Skills**
- Be capable of living a culturally rich life
- Are intellectually, technically, creatively, and technologically prepared to be artistic members of their communities

DEPARTMENT CHAIR
Marc R. Dickey

DEPARTMENT OFFICE/WEBSITE
Performing Arts 220
657-278-3511
www.fullerton.edu/arts/music

PROGRAMS OFFERED
Bachelor of Arts in Music
- Liberal Arts
- Music Education
- Music History and Theory
Bachelor of Music
- Composition
- Instrumental
- Keyboard
- Voice
- Accompanying
- Jazz and Commercial Music
Minor in Music
Master of Arts in Music
- Music History and Literature
- Music Education
- Piano Pedagogy
Master of Music
- Performance
- Theory-Composition
Single Subject (Secondary) Credential in Music

FACULTY
Bachelor in Music

The following learning goals and outcomes have been established for students pursuing a bachelor of music degree in Music:

**Musical Practitioners**
- Be competent and reflective practitioners of the art of music through the study of cultural diversity, musical literature and criticism
- Be passionate and confident about their work as performers
- Practice successful collaboration onstage and backstage
- Be intellectually curious and decisive in exploring new avenues of expression through work on new works and reexamination of traditional repertoire
- Have a flexible, relaxed, and controlled body trained in basic movement disciplines

**Musical Scholars**
- Have a basic knowledge of music history, literature and theory
- Exercise professional standards of oral and written communication
- Are intellectually, creatively, and technologically prepared to be artistic members of their communities through written critiques, review and analytical papers
- Have well-rounded educational backgrounds acquired through studies in general education courses
- Demonstrate comprehension of the basic business procedure of the musician’s profession

**Lifelong Skills**
- Be capable of living a culturally rich life
- Have clear and articulate speech

Master of Arts in Music

The following learning goals and outcomes have been established for students pursuing a master of arts degree in Music:

**Musical Practitioners**
- Be competent and reflective practitioners of the art of music
- Be passionate and confident about their work through the success of their performances
- Practice successful collaboration through performances and production
- Be intellectually curious and decisive in exploring new avenues of expression through work with their instruments in various venues

**Musical Scholars**
- Exercise professional standards of oral and written communication

**Lifelong Skills**
- Are intellectually and creatively prepared to be artistic members of their communities
- Demonstrate competence to enter their professional field with a broad range of skills, especially knowledge of their instrument

Requirements for Undergraduate Music Majors

1. Music majors are generally enrolled in the Bachelor of Arts degree program at the time of admission. Students may request a change in their degree objective to the Bachelor of Music upon completion of at least one semester of coursework at the university, successful completion of a jury examination and recommendation of the faculty in the appropriate area of concentration. Exceptional transfer students may be permitted to enter the B.M. program at the beginning of their first semester. Enrollment in the Bachelor of Music program is limited.

2. Upon entering the university as a new music major, or upon officially changing to a major in music, each student will present an audition in the appropriate principal performance area (instrument or voice) and a placement audition for class piano, unless the student’s principal instrument is piano or organ.

3. All students must pass proficiency examinations in traditional harmony (sight-singing, dictation, keyboard and paperwork) and piano before being approved for graduation. Transfer students will fulfill the theory requirement by passing the entrance examination in theory; first-time students and transfers with insufficient preparation at entrance will normally take the examinations in MUS 211 and 221. The piano-proficiency requirement may be met by completing MUS 282B with a grade of “C” (2.0) or better. Students planning to enter the teaching credential program in music are required to earn a “B” (3.0) or better in MUS 282B. Students whose principal performance area is piano or organ may satisfy the piano-proficiency requirement by completing MUS 285 with a grade of “C” (2.0) or better; this requirement must be completed prior to a student’s promotion to 300 level.
4. Each music major must declare a single principal performance area, which must be approved by the faculty of that area upon completion of the entrance audition. A successful audition is required for the student to receive state-funded applied-music instruction at the 100 (freshman) level. Instruction must commence in the student’s first semester as a music major. The major of students whose auditions do not qualify them to receive instruction at the 100 level will be changed administratively from music to “undeclared.” A new student must meet all university admission requirements and be fully matriculated into the university no later than one week before the beginning of classes in order to receive state-funded applied music. In order to be approved for graduation, each student must achieve at least the 300 level of proficiency in the principal performance area. B.A. Liberal Arts-option students who elect project alternative 2 (MUS 497: Project) need reach only the 200 level.

5. Each music major is required to present one or more recitals or a project appropriate to the degree program before being approved for graduation. The project option is available only in the Liberal Arts and Music History and Theory options of the Bachelor of Arts degree. Recitals at the 300 level of performance are designated MUS 398; recitals at the 400 level of performance are designated MUS 498. See the sections below on the Liberal Arts and Music History and Theory options for recital/project information applicable to those degrees.

6. Undergraduate music majors are required to participate in a major performance ensemble (MUS 406) and complete it with a grade of “C” (2.0) or better each semester of residence as follows:
   a. Students who declare a wind instrument or percussion as the principal performance area must register for band; students who declare a string instrument as the principal performance area must register for orchestra; students who declare voice as the principal performance area must register for choir.
   b. Students accepted into the Bachelor of Music program in Jazz and Commercial Music will register for Jazz Ensemble as their major performance ensemble after they have completed four major ensemble units. Students who declare jazz keyboard, electric guitar or electric bass as their principal instrument must complete two units of major performance ensemble, after which they may enroll for 408J as a substitute for the next two units of the major performance ensemble requirement. After this, these students must enroll for Jazz Ensemble (MUS 406L, S or T) for the major ensemble requirement, according to the student’s qualifications and subject to audition. Music Majors admitted into the Bachelor of Music program in jazz and commercial music studies and have participated in a major performance ensemble at CSUF for at least four semesters will thereafter enroll in Jazz Ensemble (MUS 406L, S or T) to satisfy the departmental major performance requirement.
   c. A student whose principal performance area is keyboard or classical guitar must register for one of the above major performance ensembles, according to the student’s qualifications and subject to audition.
   d. A music major who has been admitted into the Bachelor of Music program in composition, keyboard or classical guitar, and who has participated in a major performance ensemble for at least five semesters (a minimum of two semesters at California State University, Fullerton), may thereafter substitute chamber music and/or small performance ensembles (MUS 386, 407, 408) to satisfy the departmental major performance ensemble (MUS 406) requirement.
   e. The educational purpose of the requirement that all music majors participate in an appropriate major performance ensemble during each semester of residence is to permit each student to experience the highest level of ensemble music-making commensurate with the student’s skill. To this end, the CSUF choir and band programs are of the traditional graded structure. University Singers (406E) and Wind Symphony (406F) are for the more advanced students; Men’s Chorus (406M), Symphonic Winds (406C) and Women’s Choir (406W) are for students of less skill or experience. Placement in bands, orchestra, and choirs will be based on student abilities determined by the directors of those ensembles. Music majors will be assigned to the ensemble for which they are best qualified. A student does not have the option of satisfying the requirements for participation in a major performance ensemble by enrolling in an ensemble intended for those of less ability or experience.
   f. A student who has completed state-funded lessons, who is not taking lessons at all, or who is taking fewer than six units of music must still be in an appropriate major performance ensemble.

7. Applied-music study in the principal performance area is required as stipulated under the requirements for each degree program. The following conditions apply:
   a. If a student pursuing the Bachelor of Arts degree or the Bachelor of Music degree reaches the 300 level in the principal performance area before the required units in applied music are completed, Music Department electives may be substituted for the remaining applied-music units.
   b. In addition to the six units of applied music required in the principal performance area, Bachelor of Music students in the Composition concentration must complete six units of applied composition (including the 498 recital) after taking MUS 422. The 498 recital will consist of a presentation of the student’s own compositions.
   c. Students pursuing the Bachelor of Music degree in any option except Composition must achieve the 300 level in performance before giving the 398 recital and 400 level in
performance before giving the 498 recital. Recital approval will be given only to students who are currently studying with CSUF applied music faculty. Specific information on jury-level criteria is available from the Music Department office.

d. In order to qualify for state-funded applied music (including MUS 398 and MUS 498 recitals), an undergraduate student must currently be enrolled for a minimum of six units of music classes (including applied music), at least two of which must be in an academic area, i.e., any course other than performing ensembles and applied music. (A student needing fewer than six units of music classes to graduate will not be required to take extra units to meet the six-unit requirement and will receive applied instruction if otherwise qualified.) In addition, the student must be enrolled in the appropriate major performance ensemble, as stipulated in section 6 above. If the student receives a grade of “D+” (1.3) or lower, or “WU” in applied music or in the major performance ensemble, or if the student fails to complete six units of music classes as described above, applied lessons will be withheld in the subsequent semester. A student who fails applied music must present an acceptable reinstatement audition before state-funded lessons will be resumed.

e. Students are limited to a maximum of three semesters of applied music at a given level of performance. Applied music may be denied for failure to make satisfactory progress within the degree.

f. Students in the B.A. program are eligible for a maximum of eight units of state-funded applied music (398 and 497 included). B.M. students are eligible for a maximum of 14 units (398 and 498 included).

8. To be approved for graduation, a music major must maintain a 2.5 GPA in all music coursework that is to be used to meet degree requirements. In addition, a student must earn a grade of “C” (2.0) or better in all music courses required for the Bachelor of Arts in Music or Bachelor of Music degree.

9. All requests for exceptions to departmental or curricular requirements must be directed by petition in advance to the department chair.

10. Undergraduate music majors are required to accumulate 60 hours of performance-related activities—30 hours during each of the first two semesters or 15 hours during each of the first four semesters of matriculation as a music major at CSUF. Performance-related activities include recital and concert attendance, as well as learning about and participating in house and stage management, publicity and public relations, lighting and sound editing.

BACHELOR OF ARTS IN MUSIC (120 UNITS)

The Bachelor of Arts in Music requires at least 50 units of music, 29 of which are upper-division (300-level and above). All Bachelor of Arts students must complete the core requirements, as well as the additional coursework needed for one of three concentrations: Liberal Arts; Music History and Theory; Music Education.

Core Requirements (34 units)

Music theory/musician (12 units)
MUS 111, 112, 121, 122, 211, 221, 319
Music history and literature (14 units)
MUS 151; 351A,B,C; 462
Principal performance area (applied music) (4 units)
Major performance ensemble (4 units)
MUS 406A,C,E,F,L,M,S,W as appropriate to the concentration and emphasis

*See “Requirements for Undergraduate Music Majors,” item 6

LIBERAL ARTS CONCENTRATION (50 UNITS)

Core Requirements (34 units)

Additional Requirements (16 units)

Music theory (6 units)
MUS 316, 326 or 418; 320; 323 or 422
Conducting (2 units)
MUS 382A or 383A
Senior recital or project (1 unit)
MUS 398 or 497
Music history and literature (2, 3 units)
From MUS 451 through 459A inclusive
Electives in Music (5 units)
Minimum of five units upper-division; no more than two units of applied music

The capstone experience in Liberal Arts concentration is either MUS 398 (recital) or 497 (senior project). A document outlining procedures and expectations for the latter option is available from the Department of Music. When the recital option is elected, the recital will be included when calculating the student’s quota of state-funded applied-music lessons.

MUSIC HISTORY AND THEORY CONCENTRATION (50 UNITS)

Students must submit a paper to the music history or theory coordinator no later than the beginning of their junior year. Acceptance into the degree program is contingent on the submission of a satisfactory paper. Student grades in prior music history and theory courses will also guide faculty decisions regarding a student’s acceptance into the degree program.
Allied Requirement
Foreign language proficiency, preferably German, to be satisfied as described under the requirements for the Bachelor of Music, Voice Concentration.

Core Requirements (34 units)

Additional Requirements (16 units)

Music theory (10 units)
MUS 316 or 418; 320; 419; 420
Conducting or composition (2 units)
MUS 382A or 383A or 422
Project-proposal preparation (1 unit)
MUS 499
Music history or theory project (1 unit)
MUS 497
Electives in Music (2 units)
Minimum of two upper-division units

Music Education Concentration
Students intending to teach music in the California public schools must complete the B.A. in Music Education and certain additional courses and competence examinations to meet the requirements of the Single Subject Matter Preparation Program (SSMPP). (See below, Earning a Teaching Credential.) Completion of the SSMPP leads to consideration for acceptance into the Single-Subject Credential Program in Music (which includes student teaching). Subsequent completion of the Credential Program then earns the student a credential (license) from the State of California to teach music in California public schools, grades K-12.

Instrumental Emphasis (50 units)

Core Requirements (34 units)

Additional Requirements (16 units)
Orchestral instruments (4 units)
MUS 281B, P,S,W
Music theory (4 units)
MUS 320, 323
Conducting (4 units)
MUS 382A, B
Instrumental Music Education Practicum (3 units)
MUSE 394
Chamber music (2 units)
MUS 407D,E,M,Y; 408B, G,S,W,X
Recital (1 unit)
MUS 398

Choral Emphasis (50 units)

Core Requirements (34 units)

Additional Requirements (16 units)
Music theory (2 units)
MUS 320
Orchestral instruments (1 unit)
MUS 284
Music and Child Development (3 units)
MUS 333
Conducting (4 units)
MUS 383A,B
Literature and pedagogy (4 units)
MUS 354, 468
Chamber music (2 units)
MUS 406D, 407V, 408C, 408V
Recital (1 unit)
MUS 398

General Music Emphasis (50 units)

Core Requirements (34 units)

Additional Requirements (16 units)
Music theory/musicianship (MUS 111, 112, 121, 122, 211, 221, 319) (12)
Music history and literature (MUS 151; 351A,B,C; 462) (14)
Principal performance area (applied music) (4)
Major performance ensemble (MUS 406A,C,E,F,M,W) (4)*

Recital (1 unit)
MUS 398
Piano Pedagogy Emphasis (63 units)

The emphasis in piano pedagogy is does not lead to a teaching credential for the California public schools.

Core Requirements (34 units)

Additional Requirements (29 units)

Music theory (2 units)
MUS 320

Music history and literature (4 units)
MUS 454A,B

Keyboard ensemble (1 unit)
MUS 408K

Applied piano (3 units)
MUS 393

Conducting (2 units)
MUS 382A or 383A

Recital (1 unit)
MUS 398

Piano Pedagogy/Practicum (9 units)
MUS 467A,B,C; 477

Piano Pedagogy/Observation and Internship (3 units)
MUS 466

Advanced MIDI, Harpsichord, Organ (1 unit)
MUS 372, 373, 426

Functional Skills for Keyboard Majors (2 units)
MUS 285

Piano-Vocal Collaboration (1 unit)
MUS 386

EARNING A TEACHING CREDENTIAL

Students intending to teach music in the California public schools must demonstrate subject-matter competence prior to admission to the Single Subject Credential program. This may be done either by: (a) completing the coursework for the Single Subject Matter Preparation Program (SSMPP); or (b) passing subject-matter tests specified by the State of California (CSET) and administered by the Educational Testing Service. Applications are accepted only in the spring for the credential program (Feb. 28 deadline) beginning the subsequent fall. In both cases, an interview and certain competence examinations administered by the Music Education area must be passed prior to enrolling in the Single Subject Credential Program in Music (which includes student teaching).

The following courses are prerequisite to admission to the Credential program for students who choose to complete SSMPP coursework in lieu of taking the subject matter examination (CSET). These courses are intended to be taken concurrently with degree work.

Instrumental Emphasis (27 units)

MUSE 395, 404
MUS 283, 333, 353, 444, 469
EDSC 310, 320, 330, 340

Choral Emphasis (23 units)

MUSE 394, 395, 404
MUS 380A
EDSC 310, 320, 330, 340

General Music Emphasis (21 units)

MUSE 394, 395, 404
MUS 380A,B or C
EDSC 310, 320, 330, 340

Prior to admission to the Single Subject Credential Program in Music, the student must have completed all SSMPP requirements, including the bachelor's degree, with the recital (MUS 398) completed.

Applicants for the Single Subject Credential Program in Music must also demonstrate functional ability in keyboard and voice. Keyboard competence may be shown either by successful audition or completion of MUS 282B (Piano Class for Music Majors) with a minimum grade of “B” (3.0). Vocal competence may be shown either by successful audition or completion of MUS 283 (voice class) with a minimum grade of “B” (3.0).

A minimum GPA of 2.75 in the last 60 units of coursework is required for admission to the Single Subject Credential Program in Music.

The prospective Single Subject Credential student must pass the CBEST (California Basic Education Skills Test), as well as an assessment interview with the Music Education faculty. In the interview the applicant is expected to demonstrate musical and interpersonal skills essential to music teaching, as well as an overall synthesis of learning.

Once accepted into the Single Subject Credential in Music, students must complete the following 31 units to earn the preliminary Single Subject Credential:

Music Education – MUSE 442 (3), 449E (3)
Professional Education – EDSC 410 (3), 440F (2), 440S (4)
Student Teaching – MUSE 449I (10), 449S (3), EDSC 460 (3)
BACHELOR OF MUSIC (132 UNITS)

A minimum of 70 semester units in music are required, at least 32 of which must be upper-division.

Core Requirements for all concentrations (39 units)
Music theory (14 units)
MUS 111, 112, 121, 122, 211, 221, 319, 320
Music history and literature (14 units)
MUS 151; 351A,B,C; 462
Principal performance area (6 units)
Applied music
Major performance ensemble (4 units*)
MUS 406
Recital (1 unit)
MUS 498

* See “Requirements for Undergraduate Music Majors,” item 6

COMPOSITION CONCENTRATION (70 UNITS)
Additional Requirements (31 units)
Music theory (14 units)
MUS 316, 323, 418, 419, 420, 422
Conducting (4 units)
MUS 382A and 383A; or MUS 382A and 382B, or MUS 383A and 383B
Applied composition (5 units)
Electives in music (8 units)
Allied Requirement for Composition Concentration

Students in the Composition Concentration must demonstrate proficiency in one foreign language (French, German or Italian) to be satisfied as described under the requirements for the Bachelor of Music, Voice concentration.

INSTRUMENTAL CONCENTRATION (70 UNITS)
Additional Requirements (31 units)
Music theory (6 units)
MUS 316 or 323, 418, 422
Principal performance area (6 units)
Applied music
Recital (1 unit)
MUS 398
Conducting (4 units*)
MUS 382A,B

*Guitar students may substitute additional electives (2) for 382B

Keyboard Concentration (70 units)
Additional Requirements (31 units)
Music theory (4-5 units)
MUS 316, 422
Music history and literature (4 units)
MUS 386
Pedagogy (6 units)
MUS 467A,B,C
Harpsichord or organ class (1 unit)
MUS 372 or 373
Electives in music (2-3 units)

Voice Concentration (70 units)
Additional Requirements (31 units)
Music theory (4 units)
MUS 316, 422
Music history and literature (10 units)
MUS 456; 457A,B; 462
Recital (1 unit)
MUS 398
Principa performance area (6 units)
Applied music
Opera Theatre (2 units)
MUS 407D
Diction (3 units)
MUS 380A,B,C

Chamber music (6 units)
MUS 407C,D,E,G,M,Y and/or 408B,G,S,W,X
Literature (2-3 units)
Select from 451-459A
Electives in music (6 units)
Conducting (2 units)
MUS 383A
Pedagogy (2 units)
MUS 468
Elective in music (1 unit)

Allied Requirement for Voice Concentration

Students in the Voice Concentration must demonstrate proficiency in two foreign languages (chose from French, German and Italian), each to be satisfied by one of the following:
• Four years study of foreign language at the secondary school level
• Passing an examination given by the Department of Modern Languages and Literatures
• Completing the second semester of the beginning university sequence of a foreign language

ACCOMPANYING CONCENTRATION (70 UNITS)

Additional Requirements (31 units)

Music theory (6 units)
MUS 316, 418, 422
Music history and literature (2 units)
MUS 457A
Principal performance area (5 units)
Applied music
Chamber music (2 units)
MUS 408B,G,K,S,W,X
Harpichord class (1 unit)
MUS 372
Organ class (1 unit)
MUS 373
Functional skills (2 units)
MUS 285
Piano-Vocal Collaboration (2 units)
MUS 386
Conducting (2 units)
MUS 383A
Diction (3 units)
MUS 380A,B,C
Recitals (2 units)
MUS 398, 498
Electives in music (3)

Note: Two 498 recitals are required. The other is listed under “Core Requirements.”

JAZZ AND COMMERCIAL MUSIC CONCENTRATION

Instrumental Emphasis (70 units)

Core Requirements (39 units)

Music theory – MUS 111, 112, 121, 122, 211, 221, 319, 320 (14)
Music history and literature – MUS 151; 351A,B,C; 462 (14)
Principal performance area – applied music (6)*
Major performance ensemble – MUS 406 (4)*

If Piano/Electric Guitar/Electric Bass is the major instrument, two additional units of MUS 408J may be substituted to fulfill this requirement.

Recital – MUS 398 (classical and jazz in content) (1)

Additional Requirements (31 units)

MUS 213 Jazz Harmony and Analysis (2)
MUS 312 Jazz and Commercial Arranging (2)
MUS 451 Jazz History (3)
MUS 469 Jazz Pedagogy (2)

Principal Performance area (applied music-jazz) (6)
MUS 406L and/or S Major Performance Ensemble/
Jazz Ensemble I/III* (4)
MUS 408J Chamber Music Ensemble/Jazz Combo (1,1,1)
MUS 498 Recital (jazz in content) (1)

Three units from the following:
MUS 264/364/464 Jazz Improvisation (1,1,1)
MUS 384 Jazz/Commercial Keyboard (1)

Electives (5)
MUS 306 and 326 are strongly encouraged

MINOR IN MUSIC (20 UNITS)

A maximum of 14 lower-division units may be included in work counted toward the music minor. The minor must include at least five units in residence at CSUF.

Theory of Music (6 units)
MUS 101, 111, 112, 121, 122, 211, 221 or any 300- or 400-level theory classes

Music History and Literature (5-6 units)
MUS 100, 102, 151, 302, 303, 304, 305, 307, 350, 351A,B,C, 355 or courses at the 400 level

Applied Techniques (8-9 units)
MUS 182; 183; 184A,B; 185A,B; 281B,P,S,W; 282A,B; 283; 284; 326; 426; or any course in ensemble (e.g., band, orchestra, choir), conducting, piano or voice at the 300 or 400 level. Music minors may also elect to take private instruction in applied music through University Extended Education for an additional fee.
MASTER OF MUSIC AND MASTER OF ARTS IN MUSIC

Two graduate degrees in music are offered in the Department of Music: the Master of Music and the Master of Arts in Music.

Admission to Graduate Standing – Conditionally Classified

All applicants admitted into the music program enter in conditionally classified graduate standing. University requirements include:
1. a baccalaureate from an accredited institution;
2. a grade-point average of at least 2.5 in the last 60 semester units attempted;
3. good standing at the last college attended; and
4. a minimum TOEFL score of 560 (for international students).

Each applicant must also present satisfactory entrance materials according to the area of specialization (performance, composition, music history/literature, education, piano pedagogy), and pass entrance exams in music theory and music history. A student whose audition is unsatisfactory or who fails to meet satisfactorily the entrance exam requirements shall be removed from "conditionally classified" status.

Application Deadlines

Information regarding deadlines for online applications to the M.A. and M.M. degrees is available at the department website.

Graduate Standing – Classified

A graduate student may apply for classified graduate standing upon attainment of the following prerequisites: (a) complete all requirements for conditionally classified standing as described above; (b) an undergraduate major in music (or the equivalent of a major; i.e., 29 undergraduate upper-division units in music appropriate to the student’s desired graduate emphasis with a minimum grade-point average of 3.0 in the major); and (c) satisfactorily complete MUS 500. One objective of MUS 500 is the preparation of a study plan listing all coursework required for completion of the degree. This study plan must receive the approval of the Area Coordinator of the student’s area of specialization, the Music Department graduate program adviser, and the Associate Vice President for Graduate Studies and Research. Opportunity is given to the student to remove any deficiencies in undergraduate-level preparation. Courses taken to satisfy deficiencies usually will not be included on the student’s study plan and thus will not count toward the master’s degree. Students who do not pass one or more of the entrance examinations shall take and complete specified coursework with a grade of “B” (3.0) or higher or may retake the complete exam at its next administration.

Writing skills will be assessed at entrance using the student’s entrance essay and the essay portion of the music history examination. Those who do not initially possess the expected proficiency will be required to achieve it before taking MUS 500. This may include taking appropriate coursework stipulated by the Music Department. Writing proficiency will be assessed further in MUS 500. Completion of MUS 500 with a minimum grade of “B” (3.0) satisfies the writing proficiency requirement.

Prospective students must also pass entrance requirements in music theory and music history. The music theory requirement must be met by passing the entrance examination. The music history requirement must be met by passing the entrance examination. The music theory entrance requirement must be satisfied before a student may take coursework for the study plan. The music history entrance requirement must be satisfied before a student may take any 500-level music history seminar.

MASTER OF MUSIC (30 UNITS)

Applicants to the Master of Music program must have completed either a Bachelor of Music degree in performance or composition, or show evidence of equivalent rigorous training. For the entrance audition, applicants in performance must demonstrate proficiency equivalent to the 400 level, the level expected of a performance major in the Bachelor of Music program at the time of the senior recital; composition applicants must submit a portfolio of scores for examination by the theory-composition faculty. For admission to the programs in choral or instrumental conducting, applicants must show evidence of substantial conducting coursework at the undergraduate level plus practical experience. Further, to audition for entrance into the program, each choral applicant must demonstrate conducting proficiency with a mixed chorus and each instrumental applicant must demonstrate conducting proficiency with a band or orchestra. Choral applicants must also demonstrate basic vocal and keyboard proficiencies and vocal sight reading ability. Under exceptional circumstances, a videotape may be substituted for the live audition.

Study Plan

The Master of Music degree program requires that at least half of the graduate units be 500-level courses. MUS 500 must be taken within the first nine units. Students may choose to perform one or two recitals; those choosing one recital will also write a corollary essay. Under certain circumstances, and with departmental approval, a thesis may be substituted for the recital and written project.

MASTER OF ARTS IN MUSIC (30 UNITS)

Three options are offered in the Master of Arts in Music program: Option I in music history and literature, Option II in music education and Option III in piano pedagogy. For the entrance audition in history and literature, applicants must submit an example of a previously written research paper on a musical subject. Applicants to the program in music education and to the program in piano pedagogy must submit a 30-minute tape demonstrating their teaching technique in a classroom situation, plus additional written materials.

Study Plan

The Master of Arts degree program requires no more than six units of graduate study be outside the field of music and at least half of which must be in 500-level courses in the major.
Option I in music history and literature requires (a) reading ability in a foreign language, preferably German or French, prior to advancement to candidacy, and (b) a thesis. Students in Option II, music education, shall complete a thesis or a project. Students in Option III, piano pedagogy, shall complete either a project (consisting of a recital, public lecture and written essay) or a thesis.

Eight semester units are common to Options II and III – MUS 500, 406-408, and 552-555. MUS 500 must be included within the first nine units taken as a graduate student under both options.

For further details or advisement, consult the Department of Music graduate program adviser.

**MUSIC COURSES**

Courses are designated as MUS in the class schedule.

**100 Introduction to Music (3)**
Musical enjoyment and understanding through a general survey of musical literature representative of a variety of styles and performance media. Music will be related to other arts through lectures, recordings and concerts. For non-music majors.

**101 Music Theory for Non-Music Majors (3)**
Basic theory and practical applications to improve music performance and listening skills. Sight-singing and relationship to keyboard and simple melodic instruments. For non-music majors.

**102 Introduction to American Folk Music (3)**
American folk music, by region and period. Lecture, reading and listening assignments, and various audio-visual materials. No previous musical experience required.

**111 Diatonic Harmony (2)**
Scales and intervals, triads and their inversions, harmonizations, non-harmonic tones, modulation and seventh chords. Co-enrollment in MUS 121 is required for music majors and recommended for others. For Music majors or by permission of department only.

**112 Diatonic Harmony (2)**
Prerequisites: MUS 111, 121. Scales and intervals, triads and their inversions, harmonizations, non-harmonic tones, modulation and seventh chords. Co-enrollment in MUS 122 is required for music majors and recommended for others. For Music majors or by permission of department only.

**121 Musicianship I – Diatonic (1)**
Application of materials in MUS 111. Sight-singing, dictation and keyboard exercises. Co-enrollment in MUS 111 is required. For Music majors or by permission of department only. (2 hours activity)

**122 Musicianship II – Diatonic (1)**
Prerequisites: MUS 111, 121. Application of materials in MUS 112. Sight-singing, dictation and keyboard exercises. Co-enrollment in MUS 112 is required. For Music majors or by permission of department only. (2 hours activity)

**151 Survey of Western Musical Literature (2)**
Prerequisites: MUS 111, 121. Literature of music in Western civilization. Students should be able to read music in order to analyze form and style. For Music majors or by permission of department only.

**182 Piano Class for Music Majors (2)**
Prerequisites: Music majors only; MUS 111. Keyboard skills for students whose major performance instrument is not piano. For Music majors or by permission of department only. (1 hour lecture, 2 hours activity)

**183 Voice Class for Non-Music Majors (1)**
Prerequisite: consent of instructor. Elementary singing and musicianship techniques. Recommended for non-majors who wish to participate in a CSUF choral ensemble or for students who wish to apply for music major status. May be repeated for credit. (2 hours activity)

**184A Piano Class for Non-Music Majors (1)**
Beginning and elementary piano skills for the non-music major. (2 hours activity)

**185A Guitar Class for Non-Music Majors (1)**
Beginning and elementary classical guitar techniques for the non-music major. May be repeated for credit. (2 hours activity)

**185B Guitar for Non-Music Majors (1)**
Prerequisite: MUS 185A or consent of the instructor. Elementary classical guitar techniques for the non-music major. Continuation of MUS 185A. May be repeated for credit. (2 hours activity)

**191 Individual Instruction (1)**
Prerequisite: jury recommendation. Individual study with assigned instructor. Performance technique, repertoire and other responsibilities as assigned. Jury examination required. May be repeated for credit.

**192 Individual Instruction (2)**
Prerequisite: jury recommendation. Individual study with assigned instructor. Performance technique, repertoire and other responsibilities as assigned. Jury examination required. May be repeated for credit.

**196 Student-to-Student Tutorials (1-3)**
Prerequisites: 3.0 or higher grade-point average and/or consent of instructor and simultaneous enrollment in the course, or previous enrollment in a similar course or its equivalent. Consult “University Curricula” in this catalog for a more complete course description.
211 Chromatic Harmony (2)
Prerequisites: MUS 112, 122. Chromatic practice of the 19th century. Secondary dominants; ninth, 11th and 13th chords; sequence; Neapolitan and augmented sixth chords. Co-enrollment in MUS 221 is required for music majors and recommended for others. For Music majors or by permission of department only.

213 Jazz Harmony and Analysis (2)
Prerequisite: MUS 264. Pre- or corequisite: MUS 221. Provides tools to understand principles of jazz harmony and form. Description of chords, including seventh, ninth and 13th chords; altered chords; modulation as found in jazz music; and modes. (4 hours activity)

221 Musicianship III Chromatic (1)
Prerequisites: MUS 112, 122. Application of materials in MUS 211. Sight-singing, dictation, and keyboard exercises. For Music majors or by permission of department only. (2 hours activity)

264 Jazz Improvisation I (1)
Prerequisites: MUS 111, 112. Ability on a standard jazz instrument, or consent of instructor. Application of scales and their relationship to chords. Modes, jazz rhythmic phrasing, blues progressions and cycle of dominant seventh chords. Basic jazz keyboard drills and ear training are involved. (2 hours activity)

278 Music Production and Performance (1)
Training and experience in the production of live performance, including house management, stage management and publicity, as well as guided observation and reflection on a diverse range of musical events.

281B Orchestral Instruments/Brass Instruments (1)
Techniques and materials for teaching orchestral instruments. Intended for Music Education majors. (3 hours activity)

281P Orchestral Instruments/Percussion Instruments (1)
Techniques and materials for teaching orchestral instruments. Intended for Music Education majors. (3 hours activity)

281S Orchestral Instruments/String Instruments (1)
Techniques and materials for teaching orchestral instruments. Intended for Music Education majors. (3 hours activity)

281W Orchestral Instruments/Woodwind Instruments (1)
Techniques and materials for teaching orchestral instruments. Intended for Music Education majors. (3 hours activity)

282A Piano Class for Music Majors (2)
Prerequisite: MUS 182 with a “C” (2.0) or better, or consent of instructor. Keyboard skills for students whose major performance field is not piano. For Music majors or by permission of department only. (1 hour lecture, 2 hours activity)

282B Piano Class for Music Majors (2)
Prerequisite: MUS 282A with a “C” (2.0) or better, or consent of instructor. Keyboard skills for students whose major performance field is not piano. Meets minimum piano proficiency requirements for degree. For Music majors or by permission of department only. (1 hour lecture, 2 hours activity)

283 Voice Class for Instrumentalists (1)
Prerequisite: teaching credential candidate or consent of instructor. Vocal skills for students whose major performance field is not voice. Prepares music education students to work with young singers in group settings by understanding their own vocal problems and the solutions in a variety of vocal styles. Satisfies voice-proficiency requirement for music credential candidates. (2 hours activity)

284 Instrument Class for Singers, Pianists, and Guitarists (1)
Instrumental skills for music majors and minors other than Instrumental Music Education. Prepares Choral and General-Music education students to work with beginning instruments in group settings. Study of ranges, transpositions and techniques of various orchestral instruments. (3 hours activity)

285 Functional Skills for Keyboard Majors (2)
Development of the ability to sight-read, harmonize, transpose and improvise. (4 hours activity)

291 Individual Instruction (1)
(See MUS 191, 192)

292 Individual Instruction (2)
(See MUS 191, 192)

302 History of Jazz (3)
Prerequisite: completion of General Education (G.E.) Category C.1. Historical study of jazz music in America, along with its antecedents; chronological development and stylistic evolution with consideration of related trends. Listening, reading and written work. Intended for non-music majors. May not be used as a music-major elective.

303 World Music (3)
Prerequisite: completion of G.E. Category C.1. Art, folk and popular music of selected world areas; topics vary according to semester and are chosen from Latin American, North American, Asian, African and European cultures and traditions. Listening, reading and written work. Intended for non-music majors. May not be used as a music-major elective.
304 Music of Mexico (3)
Prerequisite: completion of G.E. Category C.1. Historical survey of folk, popular, and art music traditions of Mexico and music in Mexican American/Chicano society, with coverage of pre-Cortesian and contemporary indigenous musical practices; focus on the relationship of music to Mexican history and culture. Listening, reading and written work. Intended for non-music majors. May be used as a music-major elective. (Same as CHIC 304)

305 Women in Music (3)
Prerequisite: completion of G.E. Category C.1. Contributions women have made as composers and performers, and as musical patrons, as well as the historical limitations to which women musicians have been subject. Listening, reading and written work. Intended for non-music majors. May be used as a music-major elective.

306 Business of Music (3)
Prerequisite: MUS 100 or 151. Comprehensive survey of the business aspects of songwriting, publishing, copyright, legal affairs, the record industry, music in broadcast and film, and career planning and development.

307 History of Rock Music (2)
Prerequisite: completion of G.E. Category C.1. History of American and British rock and popular music and their place in society; begins with the study of the roots of American popular music. Listening, reading and written work. Intended for non-music majors. May be used as a music-major elective. One or more sections offered online.

308 Music of the Middle East (3)
Prerequisite: completion of G.E. Category C.1. Middle Eastern music in its socio-cultural, historical and global contexts. Development of listening, critical thinking and writing skills. Directed towards non-majors.

312 Jazz and Commercial Arranging (2)
Prerequisite: MUS 211, 213. Harmonic practices in commercial music; stage band and jazz writing techniques. May be repeated once for credit.

314A Special Projects in Jazz and Commercial Music (2)
Prerequisite: MUS 312 or consent of instructor. Three- and four-part voice accompaniment; planning and executing the multichorus, small-group arrangement.

314B Special Projects in Jazz and Commercial Music (2)
Prerequisite: MUS 314A or consent of instructor. Introduction to harmonic substitutions; planning and executing arrangements for larger groups of instruments.

316 16th-Century Counterpoint (2)
Prerequisite: MUS 211, 221. Sixteenth-century counterpoint in two, three and four parts, covering motet, canon, double counterpoint.

319 Form and Analysis (3)
Prerequisite: MUS 211, 221. Structural elements of music such as motive, phrase and period: binary, ternary, rondo, sonata allegro and larger musical forms in representative musical works.

320 20th-Century Techniques to 1945 (2)
Prerequisite: MUS 211, 221. Compositional practices from 1890 to 1945; Written examples in the various styles. Sight singing, keyboard practice and dictation. (1 hour lecture, 2 hours activity)

323 Orchestration (2)
Prerequisites: MUS 319, 320 or consent of instructor. Instrumentation and scoring. Writing and analyzing orchestral music.

326 Introduction to Music Technology (2)
Prerequisites: Music major and MUS 211, 221. Theory and use of computer software for sound design and music production. Demonstrations and assignments dealing with techniques for creating music in the digital domain.

333 Music and Child Development (3)
Prerequisite: Music majors only or consent of instructor. Relationship of music to child growth and development for the child ages five to 12. Survey of age-appropriate music materials.

350 Music in American Society (3)
Prerequisite: completion of G.E. Category C.1. Music in its relationship to American culture and society. Sociological approach through the study of musical repertoires and concert life, as well as audience participation in musical consumption. Listening, reading and written work. Intended for non-music majors. May not be used as a music-major elective.

351A History and Literature of Western Music (3)
Prerequisites: MUS 112, 122, 151. History and literature of European music, from early Greek beginnings through the Renaissance. Listening, reading and written work. Intended for music majors.

351B History and Literature of Western Music (3)
Prerequisites: MUS 151, 211, 221, 351A. History and literature of European music of the Baroque and Classic eras. A grade of "C" (2.0) or higher fulfills the course requirement of the university upper-division baccalaureate writing requirement for music majors. Listening, reading and written work. Intended for music majors.

351C History and Literature of Western Music (3)
Prerequisites: MUS 151, 211, 221; 351A,B. History and literature of European and American music, from the Romantic era to the present. Intended for music majors.

353 Public-School Instrumental Music Materials (2)
Prerequisite: MUS 382A or concurrent enrollment. Instrumental-music materials, repertoire, programming and curriculum for public-school instrumental-music ensembles. Topics include solo, chamber and large-ensemble repertoire.
354 Survey of Public School Choral Music Materials (2)
Prerequisite: MUS 383A. Examination and analysis of choral repertoire suitable for junior and senior high choruses.

355 Film Music (3)
Prerequisite: completion of G.E. Category C.1. Historical survey of the use of music in motion pictures. Analysis and examination of film scores. Listening, reading and written work. Intended for non-music majors. May be used as a music-major elective.

356 Afro-American Music Appreciation (3)
(Same as AFRO 356)

357 Blacks in the Performing Arts (3)
(Same as AFRO/THTR 357)

364 Jazz Improvisation II (1)
Prerequisite: MUS 213 or consent of instructor. Continuation of modal patterns and jazz rhythms for improvisation. Melodic construction in improvisation. Playing II-V-I progressions in major and minor keys. Form, stylistic analysis and ear training. (2 hours activity)

365G Guitar Performance Workshop (1)
Prerequisite: consent of instructor. Weekly workshop performances by students, faculty and guests. Recommended for guitar majors each semester. May be repeated for credit. (2 hours activity)

365I Instrumental Workshop (1)
Prerequisite: consent of instructor. Weekly workshop performances by students, faculty and guests. Recommended for instrumental majors each semester. May be repeated for credit. (2 hours activity)

365K Keyboard Workshop (1)
Weekly workshop performances by students, faculty and guests. Recommended for keyboard majors each semester. May be repeated for credit. (2 hours activity)

365S String Workshop (1)
Prerequisite: consent of instructor. Weekly workshop performances by students, faculty and guests. Recommended for string majors each semester. May be repeated for credit. (2 hours activity)

365V Vocal Workshop (1)
Corequisite: enrollment in applied vocal study or consent of Vocal Area Coordinator. Techniques of artistic performance explored through classroom demonstrations, master classes, and recitals on and off campus. Additional recital and performance attendance required. Course may be repeated for credit. (2 hours activity)

372 Harpsichord Class for Music Majors (1)
Prerequisite: 300 jury level in piano or organ, or consent of instructor. Harpsichord as an instrument, the application of Baroque stylistic characteristics and training in the rudiments of continuo playing in ensemble with voices and instruments. (2 hours activity)

373 Organ Class for Music Majors (1)
Prerequisite: 300 jury level in piano or consent of instructor. Organ as an instrument, the playing techniques and repertoire. Differences between piano and organ techniques. (2 hours activity)

380A Diction for Singers (English and Italian) (1)
Prerequisites: sophomore standing and music major status and consent of instructor. Introduces the International Phonetic Alphabet as the fundamental tool for improving singing diction. Refining English and Italian diction through group, individual exercises. Not a substitute for formal foreign-language study. (2 hours activity)

380B Diction for Singers (German) (1)
Prerequisite: MUS 380A. Problems of basic phonetics in German as applied to singing diction. Continued study of the International Phonetic Alphabet with oral and written exercises. Not a substitute for formal foreign-language study; prior study of German recommended. (2 hours activity)

380C Diction for Singers (French) (1)
Prerequisite: MUS 380A. Problems of basic phonetics in French as applied to singing diction. Continued study of the International Phonetic Alphabet with oral and written exercises. Not a substitute for formal foreign-language study; prior study of French recommended. (2 hours activity)

382A Instrumental Conducting (2)
Prerequisites: two courses from MUS 284; 281B,P,S,W; or consent of instructor. Principles, techniques, and methods of conducting orchestral and band groups. (4 hours activity)

382B Instrumental Conducting (2)
Prerequisites: two courses from MUS 284; 281B,P,S,W; or consent of instructor. Continuation of 382A, including laboratory experience in conducting instrumental groups, using standard instrumental literature. (4 hours activity)

383A Choral Conducting (2)
Prerequisite: one semester of voice class or consent of instructor. Principles, techniques and methods of conducting choral groups. (4 hours activity).

383B Choral Conducting (2)
Prerequisites: MUS 383A plus one semester of voice class or consent of instructor. Continuation of 383A, including laboratory work with class and vocal ensembles, using standard choral repertoire. (4 hours activity)

384 Jazz/Commercial Keyboard (1)
Prerequisite: Pass Piano Proficiency or MUS 282B. Provides skills to play underlying harmonies and keyboard voicings found in jazz and popular music. (2 hours activity)
474 MUSIC

385G Guitar Fingerboard Skills (2)
Prerequisite: upper-division guitar standing or consent of instructor. Developing comprehensive understanding of the guitar fingerboard, with emphasis on scales, intervals, chord formation, harmonic progressions and sight-reading. (2 hours activity)

386 Piano–Vocal Collaboration (1)
Prerequisite: 300 level in performance and consent of instructor. Collaborative skills for pianists and vocalists, with representative examples from standard teaching literature for voice and piano. Classroom performances, outside rehearsals, listening and recital attendance required. May be repeated for credit. (2 hours activity)

391 Individual Instruction (1)
(See MUS 191, 192)

392 Individual Instruction (2)
(See MUS 191, 192)

395 Internship and Professional Experience (1-3)
Fieldwork in music under supervision of resident faculty and professionals in the field. Requires minimum six hours fieldwork per week for each unit credit. May be repeated for credit to a maximum of six units. Open to all music students by consent of instructor.

398 Recital (1)
Prerequisites: 300 jury level in the principal performance area and consent of instructor. Corequisite: MUS 365 I, S, G, K or V. Preparation and presentation of representative works in the principal performance area. In the semester of recital presentation, MUS 398 will substitute for one unit of 393.

406A Major Performance Ensemble/Symphony Orchestra (1)
Prerequisite: audition or consent of instructor. Study and performance of standard and contemporary music literature. Public concerts on campus and in the community each semester. Concert tour may be included. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (More than 3 hours major production)

406B Major Performance Ensemble/Concert Choir (1)
Prerequisite: audition. Study and perform standard and contemporary music literature. Public concerts on campus and in the community each semester. Concert tour may be included. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (More than 3 hours major production) May be repeated for credit.

406C Major Performance Ensemble/Symphonic Winds (1)
Prerequisite: consent of instructor. Study and performance of standard and contemporary music literature. Public concerts on campus and in the community each semester. Concert tour may be included. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (More than 3 hours major production)

406D Major Performance Ensemble/Opera Theatre (1)
Prerequisites: audition and consent of instructor. Musical, dramatic and language techniques of music theatre. Assignments made according to casting requirements. Public performances of scenes, programs or complete operas. Open to majors and non-majors. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (3 or more hours activity)

406E Major Performance Ensemble/University Singers (1)
Prerequisite: audition. Study and perform standard and contemporary music literature. Public concerts on campus and in the community each semester. Concert tour may be included. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (More than 3 hours major production) May be repeated for credit.

406F Major Performance Ensemble/Wind Symphony (1)
Prerequisite: advanced wind and percussion students accepted by audition. Study and perform standard and contemporary music literature. Public concerts on campus and in the community each semester. Concert tour may be included. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (More than 3 hours major production)

406H Major Performance Ensemble/Opera Orchestra (1)
Prerequisite: permission of instructor. Performance in the orchestra for collaborative Music Department/Theatre Department productions, musical preparation, joint rehearsal preparation with the Theatre Department, and performances. Does not satisfy the Music Department major performance ensemble requirement. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (3 or more hours activity)

406L Major Performance Ensemble/Jazz Ensemble I (1)
Prerequisite: audition and consent of instructor. Study and perform advanced standard and contemporary jazz literature for large ensemble. Public concerts on campus and in the community each semester. Concert or jazz festivals tours may be included. May be repeated for credit every semester by undergraduate music majors, or up to five times by students in graduate music programs. (3 or more hours activity)

406M Major Performance Ensemble/Men’s Chorus (1)
Prerequisite: audition. Learn and perform a wide variety of high-quality choral literature written especially for men’s voices. Gain improved competence in sight singing, musicianship, and vocal skills. Open to both music majors and non-music majors. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (3 or more hours activity)
406S Major Performance Ensemble/Jazz Ensemble II (1)
Prerequisite: audition or consent of instructor. Study and perform standard and contemporary jazz literature for large ensemble. Public concerts on campus and in the community each semester. Concert or festival tours may be included. May be repeated for credit every semester by undergraduate music majors, or up to five times by students in graduate music programs. (3 or more hours activity)

406T Major Performance Ensemble/Jazz Ensemble III (1)
Prerequisite: audition or consent of instructor. Study and perform standard and contemporary jazz literature for large ensemble. Public concerts on campus and in the community each semester. Concert or festival tours may be included. May be repeated for credit. (3 or more hours activity)

406U Major Performance Ensemble/University Band (1)
Prerequisite: consent of instructor. Study and perform standard and contemporary music literature. Public concerts on campus and in the community each semester. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (More than 3 hours major production)

406W Major Performance Ensemble/Women’s Choir (1)
Prerequisite: consent of instructor. Learn and perform a wide variety of high-quality choral literature written especially for women’s voices, while improving competence in sight singing, musicianship and vocal skills. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (3 or more hours activity)

407C Cello Choir (1)
Open to cellists by audition. Rehearse, study and perform literature written or arranged for various groups of cellos. Combine rehearsals, sectionals, workshops, master classes and joint concerts with guest artists/conductors. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

407D Percussion Ensemble (1)
Prerequisite: consent of instructor. Study and perform music written for percussion ensemble. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

407E Brass Ensemble (1)
Prerequisite: consent of instructor. Study and perform music written for large brass choir/ensemble. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

407G Guitar Orchestra (1)
Prerequisite: audition; consent of instructor. Numerous public performances, on and off campus, of music written for large ensemble of classical guitars. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

407K Clarinet Choir (1)
Prerequisite: audition. Study and perform music for clarinet choir. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

407M Horn Ensemble (1)
Prerequisite: consent of instructor. Study and perform music written for French horn ensemble with emphasis on the solution of various problems relating to multiple horn literature. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

407V Jazz Singers (1)
Prerequisite: audition and/or consent of instructor. Study and perform standard and contemporary vocal jazz literature. Public concerts on campus and in the community each semester. Concert/festival tours may be included. Open to non-music majors by audition. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (3 or more hours activity)

407Y Diverse Instrument Ensemble (1)
Prerequisite: audition. Ensemble of diverse instruments and voices. Performs a wide range of repertoire for indeterminate instrumentation, as well as arrangements and transcriptions of music from the Middle Ages to the present. Open to all performance areas, including electric as well as acoustical instruments. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408B Chamber Music Ensemble/Brass (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408C Collegium Musicum (1)
Prerequisite: audition. Study and perform instrumental and vocal music from the middle Ages, Renaissance and Baroque. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)
408G Chamber Music Ensemble/Guitar (1)
Open to all qualified classical guitar students and to other music students by consent of instructor. Study, read and perform representative chamber literature of all periods. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408J Chamber Music Ensemble/Jazz Combo (1)
Study, read and perform jazz repertoire representative of various styles. May be repeated for credit every semester by undergraduate music majors, or up to five times by students in undergraduate music programs. (2 hours activity)

408K Chamber Music Ensemble/Keyboard (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408S Chamber Music Ensemble/Strings (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. Multiple sections offer differing ensemble experiences: string quartet, string trio and string quintet. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408V Chamber Choir (1)
Prerequisites: MUS 406E, M or W, and consent of instructor. Study and perform standard and contemporary vocal music literature. Public concerts on campus and in the community each semester. Concert tour may be included. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408W Chamber Music Ensembles/Woodwind (1)
Open to all qualified wind, string, or keyboard students. Study, read and perform representative chamber literature of all periods. Section 1: Woodwind Quintets. Section 2: Small, Mixed Ensembles. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

408X Chamber Music Ensemble/Saxophone (1)
Open to all qualified wind, string or keyboard students. Study, read and perform representative chamber literature of all periods. May be repeated for credit every semester by undergraduate music majors or up to five times by students in graduate music programs. (2 hours activity)

411 Survey of Music Theory (3)
Prerequisites: completion of all lower-division theory requirements, and at least senior standing or equivalent. Theoretical basis of music from 1500 to the present through analysis, readings and discussion. Intended primarily for graduate and post-baccalaureate students. Fulfills graduate entrance examination requirement in music theory. May not be applied to a graduate study plan.

418 18th-Century Counterpoint (2)
Prerequisite: MUS 211, 221. Eighteenth-century counterpoint in two, three and four parts, covering invention, canon, double and triple counterpoint and fugue.

419 Advanced Form and Analysis (3)
Prerequisite: MUS 351C. Continuation of MUS 319; larger musical works.

420 Compositional Techniques since 1945 (3)
Prerequisites: MUS 320, 351C or consent of instructor. Compositional practices from 1945 to the present, including synthesis of sound. Written examples in various styles.

422 Composition (2)
Prerequisites: MUS 316, 319 and 320 or consent of instructor. Composition of smaller forms in various contemporary styles. Not available for graduate degree credit.

426 Applications of Music Technology (2)
Prerequisite: MUS 326. Continuing supervised laboratory experimentation with equipment, concepts and techniques encountered in MUS 326. Students pursue individual assignments based on experience, ability and interest. May be repeated for credit.

433 Music in Childhood (3)
Prerequisite: completion of a music course in General Education Category C.1. Songs, creative activities and materials for teaching music to elementary school-aged children. Teaching-learning strategies. Not available for graduate degree credit.

444 Survey of Marching Bands (2)
Prerequisite: consent of instructor. Techniques, materials, administration for marching band. Charting for field shows and parade activities. (1 hour lecture, 2 hours activity)

450 History of Musical Style (3)
Prerequisites: MUS 351A,B,C or equivalent, or consent of instructor. Intensive review of principal musical styles in Western music. Intended primarily for graduate and post-baccalaureate students. Fulfills graduate entrance examination requirement in music history. May not be applied to a graduate study plan.

451 Jazz History and Style (3)
Prerequisites: MUS 211; 351A,B. History and literature of jazz music, including African roots, developments and aspects of style periods, and the contemporary state of jazz. Intended for music majors. Activities include listening, analysis, and a term paper.
453A Choral Literature (2)
Prerequisites: MUS 351A,B. Choral literature, from Medieval, Renaissance and Baroque eras analyzed in historical perspective; investigation of performance practice issues.

453B Choral Literature (2)
Prerequisites: MUS 351A,B,C. Choral literature, from Classic, Romantic and Contemporary eras analyzed in historical perspective; investigation of performance practice issues.

454A Piano Literature (2)
Prerequisites: MUS 351A,B,C and upper-division piano standing or consent of instructor. Representative styles and schools of piano literature; solo and ensemble repertoire – contrapuntal forms, sonatas and variations.

454B Piano Literature (2)
Prerequisites: MUS 351A,B,C and upper-division piano standing or consent of instructor. Representative styles and schools of piano literature; solo and ensemble repertoire – character pieces, fantasies, suites, and études.

455 Wind Ensemble Literature (3)
Prerequisites: MUS 351A, B, C, 382A, B; Comprehensive survey of the history and literature of the wind ensemble. Developments in musical style and repertory, and the social and historical contexts for the wind ensemble.

456 Opera Literature (3)
Prerequisites: MUS 351A,B,C. Operatic literature and performance practices from the Baroque period through the present. Stylistic and historical considerations of selected works examined in detail.

457A Song Literature (2)
Prerequisites: MUS 319; 351A,B,C, or consent of instructor. Open to all music majors. German Lieder with representative examples of periods and styles. Historical contexts, poetry and compositional techniques. Prior study of German recommended.

457B Song Literature (2)
Prerequisites: MUS 319; 351A,B,C, or consent of instructor. Open to all music majors. French mélodie with representative examples of periods and styles. Historical contexts, poetry and compositional techniques. Prior study of French language recommended.

458 Symphonic Literature (3)
Prerequisites: MUS 351A,B,C. Literature of the symphony orchestra, from the classical era through the mid-20th century.

459A Guitar Literature (2)
Prerequisites: MUS 351A,B,C. Historical survey of the literature for Baroque and classical guitar, lute and vihuela; study of transcriptions for modern guitar.

459B Guitar Pedagogy (2)
Prerequisites: MUS 151; 211; 351A,B,C. Upper-division guitar standing or consent of the instructor. Fundamentals of teaching and coaching classical guitar. Materials and methods for individual and group instruction.

462 World Music for Music Majors (3)
Prerequisites: MUS 351 A,B,C. Art, folk and popular music of selected world areas; topics vary according to semester and are chosen from Latin American, North American, Asian, African and European cultures and traditions.

464 Jazz Improvisation III (1)
Prerequisite: MUS 364 or consent of instructor. Continuation of Jazz improvisational pedagogy and techniques with an emphasis on performance application. Form, stylistic analysis and ear training. (2 hours activity)

465S Topics in Violin Playing (1)
Concurrent enrollment in applied music. Various topics of violin playing and performing. Discussion and demonstration includes both technical and musical elements applicable to violin performance.

466 Pedagogy Observation and Internship (1)
Prerequisite: junior-level piano standing or consent of instructor. Corequisite: 467A,B or C. Observation of and supervised internship in piano teaching. Teaching techniques and development of lesson plans and materials. May be repeated for credit. (2 hours activity)

467A Piano Pedagogy (2)
Prerequisite: upper-division piano standing or consent of instructor. Materials and methods for beginning and elementary students. Co-enrollment in MUS 466 recommended.

467B Piano Pedagogy (2)
Prerequisite: upper-division piano standing or consent of instructor. Materials and methods for intermediate and early advanced students. Co-enrollment in MUS 466 recommended.

467C Piano Pedagogy (2)
Prerequisite: upper-division piano standing or consent of instructor. Materials and methods for class piano. Co-enrollment in MUS 466 recommended.

468 Vocal Pedagogy (2)
Prerequisite: junior standing, prior or concurrent college-level applied vocal study and permission of instructor. Physiology, anatomy/and acoustics as they apply to singing; fundamental principles of vocal pedagogy for studio and public school teaching. Outside practice teaching required.
469  Jazz Pedagogy (2)
Prerequisite: 300 applied level; 281B,PW recommended. Preparation to teach jazz in high schools and colleges. Background in administration, preparation, rehearsal and evaluation of various types of jazz ensembles: big bands, combos and vocal jazz groups.

477  Piano Pedagogy Practicum (3)
Prerequisites: MUS 467A,B,C. Supervised piano teaching in individual and group learning environments. Emphasizes keyboard technique, literature, communication skills, lesson plans and piano curriculum. May be repeated for credit. (6 hours activity)

484  Performance Techniques for Opera (2)
Corequisite: enrollment in MUS 493 or MUS 593; audition. Stage movement and characterization techniques for the classically trained singer. Style in performance with reference to arias and small scenes from standard operatic and music theatre literature. (1 hour lecture, 2 hours activity)

491  Individual Instruction (1)
(See MUS 191, 192)

492  Individual Instruction (2)
(See MUS 191, 192)

496  Student-to-Student Tutorials (1-3)
Prerequisites: grade point average of 3.0 and consent of instructor. Previous or concurrent enrollment in the course being tutored or an equivalent course. Consult “Student-to-Student Tutorials” in this catalog for more complete course description.

497  Senior Project (1)
Independent investigation of an area of special interest in music culminating in a research paper, lecture, or lecture-recital.

498  Recital (1)
Prerequisites: 400 jury level in the principal performance area (400 jury level in composition for composition majors) and consent of instructor. Corequisite: MUS 365 K,L,S,G, or V. Preparation and presentation of representative works in the principal performance area. In the semester of recital presentation, MUS 498 will substitute for one unit of MUS 493.

499  Independent Study (1-3)
Special topic in music selected in consultation with and supervised by the instructor. May be repeated for credit.

500  Introduction to Graduate Study in Music (3)
Required of all music graduate students within the first nine study-plan units. Basic bibliography, literature and research techniques, as well as other materials useful in graduate study.

524  Seminar in Music Theory (3)
Prerequisite: MUS 500. Theoretical subjects (form/style analysis, history of music theory, etc.) to be chosen by instructor. May be repeated for credit.

552  Seminar in Music of the Renaissance (3)
Prerequisites: MUS 351A,B,C; MUS 500; or equivalent. Forms, styles and characteristics of MUS between 1400 and 1600. Analysis of works by representative composers and theoretical writers.

553  Seminar in Music of the Baroque Period (3)
Prerequisites: MUS 351A,B,C; MUS 500; or equivalent. Musical forms, styles and performance practices of the Baroque period. Analysis of representative works.

554  Seminar in Music of the Classic Period (3)
Prerequisites: MUS 351A,B,C; MUS 500; or equivalent. History and literature of music from approximately 1730 to 1820. Analysis of representative works.

555  Seminar in Music of the Romantic Period (3)
Prerequisites: MUS 351A,B,C; MUS 500; or equivalent. Structure and development of music in the 19th century. Analysis of representative works.

556  Seminar in Twentieth-Century American Music (3)
Prerequisite: MUS 500. History and literature of American art music in the 20th century. Analysis of representative musical works and repertories, as well as musical, historical and social developments.

557  Seminar in Piano Pedagogy (3)
Prerequisites: MUS 351A,B,C; MUS 500 or equivalent. Graduate-level study of advanced learning theories, musical issues and pedagogical methods involved in teaching piano through lectures, discussions and student presentations. Practice teaching required. May be repeated for credit.

568  Graduate Seminar in Vocal Pedagogy (2)

570G  Seminar in Guitar Literature (3)
Prerequisites: MUS 351A,B,C; 500 or equivalent. Advanced study of guitar literature, with performances and analysis by class members and lectures by the instructor. Requirements can be met by performance and/or analysis. May be repeated for credit.

570P  Seminar in Piano Literature (2)
Prerequisites: MUS 351A,B,C; 500 or equivalent. Advanced study of piano literature, with performances and analyses by class members and lectures by the instructor. Requirements can be met by performance and/or analysis. May be repeated for credit.
Vocal Literature Seminar (2)
Prerequisites: MUS 457A, 457B, 500 or permission of instructor. Advanced techniques and problems in the study of vocal literature for analysis and performance. Topics include historical contexts, literary and textual interpretation, music form and analysis, and performance practices.

Seminar in Advanced Choral Conducting and Interpretation (2)
Prerequisites: MUS 383B, 500, conducting experience or consent of instructor. Choral conducting techniques. Lab work with student groups and concert conducting. May be repeated for credit.

Individual Instruction (1)
Prerequisite: jury recommendation. Individual instruction with assigned instructor. Performance techniques, repertoire and other responsibilities as assigned. May be repeated for credit.

Individual Instruction (2)
Prerequisite: jury recommendation. Individual instruction with assigned instructor. Performance techniques, repertoire and other responsibilities as assigned. May be repeated for credit.

Project (1-3)
The culminating experience of all M.M. students, and of M.A. Music Education and M.A. Piano Pedagogy students who so elect. Number of units is variable depending on options chosen in conjunction with advisers from activities, such as public recitals, lecture, corollary essay, original composition(s) or a significant research study.

Thesis (3)
Individual investigations of specific problems in the area of concentration by candidates for the M.A. degree. Students must submit an enrollment request form by week one of the preceding semester.

Independent Graduate Research (1-3)
Prerequisites: graduate standing in music and consent of instructor. Research and study projects in areas of specialization beyond regularly offered coursework. Oral and/or written reports required. Students must submit an enrollment request form by week one of the preceding semester.

Music Education Courses
Courses are designated as MUSE in the class schedule.

Music Education Practicum
Prerequisites: MUS 382B or 383B; EDSC 310. For Music Education majors. Observation and application of musical concepts and materials, experience in sequential pedagogy, classroom delivery skills, and concurrent development of management skills, aural and visual discrimination skills, error detection and transposition skills.

Clinical Practice in Conducting
Prerequisite: MUSE 394. For Music Education majors. Clinical practice and field applications of concepts, materials and procedures as applied to field situations, as in public and private schools. Each student observes, analyzes, assists when appropriate, and document a variety of actual classroom teaching situations and performances at various levels.

Microcomputers and MIDI for School Music Classrooms (3)
Prerequisite: EDSC 310. Pre-service and in-service music teachers learn how to use microcomputers and musical instrument digital interface (MIDI) for classroom management and pedagogical purposes. Students gain experience with software for word processing, database, spreadsheet, music notation, music pedagogy and MIDI.

Principles and Methods of Teaching Music in the Public Schools (3)
Prerequisite: admission to teacher education. History, principles of public education, grades K-12, with emphasis on music. Philosophy, methods, materials and procedures for organizing and teaching music in elementary and secondary schools. Must be taken concurrently with EDSC 440F and 440S.

Externship in Secondary Teaching (3)
Prerequisite: must be taken concurrently with MUSE 442. For candidates who have declared for the single subject credential in music. (Same as EDSC 449E)

Internship in Secondary Teaching (10)
Prerequisite: for candidates who have declared for the single subject credential in music. (Same as EDSC 449I)

Seminar in Secondary Teaching (3)
Prerequisite: must be taken concurrently with MUSE 449I. For candidates who have declared for the single subject credential in music. (Same as EDSC 449S)
501 Contemporary Music Education (3)
Recent renovations and overview of the history, philosophy and methodology of the art of teaching music. Trends and applications of educational theory in relation to the teaching of music.

529 Advanced Pedagogy in Music Education (3)
Advanced pedagogical strategies for music teaching and learning, including world approaches to music education (e.g., Kodaly, Suzuki, Orff), current music learning theory and applications from cognitive and developmental psychology. Implications and applications for school music classes and curriculum development.

531 Foundations of Music Education (3)

533 Psychology of Music (3)
Contemporary topics merging research and practice in the fields of music teaching and learning theory. Topics include musical behavior, psycholacoustical parameters of music, perception, affective response, musical memory, learning theory, musical cognition.