The School of Music offers both professional and liberal arts degree programs in music as well as courses that enrich the general education and cultural life of the University. The Bachelor of Arts in Music provides a humanistic approach to the study of music as a significant part of human tradition and culture. The Bachelor of Music is an intensive curriculum for qualified advanced undergraduate students seeking to attain professional levels of expertise in a specialized music discipline.

The Master of Arts in Music and Master of Music degree programs provide an advanced education for students with an undergraduate degree in music wishing to gain additional expertise in specific areas of music. The Master of Arts in Music program is for students who have highly developed interest and achievement in specific areas of music study; an interest in teaching as music faculty in two- and four-year colleges; or, are seeking preparation for professional careers in composition, including for film and video games. The Master of Music provides graduate study for the superior performer with the goal of maximum development of specialized skills. Either the Master of Arts in Music or Master of Music degree programs can be appropriate for students who have the goal of advanced graduate study at the doctoral level.

The School also offers two minors in music: a liberal arts minor, that provides a planned sequence of musical development from which future enjoyment and learning can proceed, and a minor in World Music and Dance, which is interdisciplinary in character.

A variety of individual and ensemble music performance opportunities are available to all SF State students, including Wind Ensemble, Jazz Band, University Symphony, Chamber Singers, Afro-Cuban Ensemble, and Women's Chorus. A number of small and specialized vocal and instrumental ensembles that are part of the Chamber Music, Jazz and Creative Music programs are also available. The School also participates in opera and musical-theatre productions in cooperation with the School of Theatre and Dance.

Scholarships in music are available and awarded based on musical and scholastic achievement and musical promise. Many of these scholarships are designated for specific fields of study while others are open to music majors in any field of study. Auditions for scholarships are held two to four times each year. Students must schedule an appointment to audition for a scholarship. For further information and an application, contact the School of Music.

San Francisco State University has been an accredited institutional member of the National Association of Schools of Music since 1963.

Faculty and Facilities

Faculty in the School of Music includes internationally recognized performers, composers, music educators, authors and research scholars. Each faculty member has a strong commitment to students and brings their knowledge and expertise into the process of teaching and learning music. The world-renowned Alexander String Quartet is quartet-in-residence at SF State. The members of the quartet are faculty in the School and coordinate, along with other faculty, our unique Chamber Music program. To meet our faculty, please visit the School of Music website at: http://music.sfsu.edu.

The Music Program is housed in the Creative Arts Building. Facilities include McKenna and Knuth Theatres, seating 701 and 322 respectively; three piano laboratories; choral and instrumental ensemble rehearsal space; classroom and practice facilities; a music materials resource center containing instruments and scores; an electronic music laboratory; and a music computer lab with more than 20 workstations.

The J. Paul Leonard Library provides music listening facilities; computer access; and an extensive collection of scores, recordings, and books on music. The Frank V. de Bellis Collection of Italian culture, located on the fourth floor of the library, contains historic musical instruments, rare books, musical manuscripts, and scores and archival sound recordings.

Career Outlook

Career options for music majors are very diverse. The analytical, concentration and listening skills, collaborative experiences, and broad historical and cultural knowledge gained through the study of music prepare students to achieve in many professional arenas. Their individual achievements may lead them into specific professional fields of music, including performance, composition, scholarship, teaching, or into another profession that can benefit from the knowledge and skills gained in music study.

Graduates of SF State University music programs currently perform as soloists or as members of symphony orchestras, opera, chamber ensembles, choruses, rock groups, jazz combos, and a variety of intercultural consorts. They conduct Broadway musicals, church choirs, community choruses, commercial music, operas, and symphony orchestras. Some work as composers, arrangers and producers in a wide-variety of musical environments, write recording and program notes, serve as music librarians, design and work with music technology, and work as critics and lecturers. Others teach music at every educational level from pre-school through university in independent studios and in public and private schools and colleges. They occupy key positions as music administrators and provide leadership for professional music organizations. School of Music graduates have also gone on to careers outside of music in fields as diverse as medicine, business and law. Whatever their chosen career path, the education our graduates received has provided the educational foundation they needed to provide a life filled with meaning and professional accomplishment. Wherever their careers have taken them, they continue to create, perform, analyze, write about, lobby for, and listen to music both for profit and for pleasure.

Undergraduate Programs in Music

All students wishing to pursue a major in music must pass both a performance audition on an instrument or voice, and demonstrate competency in music theory, aural and piano skills sufficient for
successful music study at a four-year university. The performance audition must establish that the individual possesses music achievement adequate to effectively engage in musical performance in the School of Music. Students who pass the performance audition may demonstrate competency in music theory, aural skills and piano either through passing placement examinations or completing specific coursework at San Francisco State University. Auditions and placement examinations are given at least twice each year. Students may only audition or take placement examinations twice.

Students who pass the performance audition but fail the placement examinations in aural skills and music theory must take MUS 130 during their first semester as music students in School of Music. A grade of C or better in MUS 130 is required to satisfy the aural skills and music theory standards required to proceed in either the Bachelor of Arts in Music or the Bachelor of Music degree programs. Students who fail the placement exam in piano may complete MUS 201. A grade of C or better in MUS 201 is required to satisfy the piano standards for admission to either the Bachelor of Arts in Music or the Bachelor of Music degree programs. While satisfying aural skills, music theory and piano degree program admissions standards, students who pass their performance audition are expected to enroll in other music courses that will apply toward university degree requirements. These courses include performance ensembles and MUS 150. Please consult with your assigned music advisor about appropriate choices.

Many music courses are available only to students admitted to the Bachelor of Arts or Bachelor of Music degree programs. Certain music courses, taken to satisfy deficiencies identified by placement examinations in aural skills, music theory, and piano, may not count as part of a Bachelor of Arts in Music or Bachelor of Music degree program.

All music majors are assigned a faculty advisor with whom they confer each semester to develop an appropriate program of study.

Individual instrumental and vocal applied lessons are restricted to music majors who have passed the performance audition and the aural skills and music theory placement examinations. Participation in an ensemble is required of all students enrolled in applied lessons. Students enrolled in individual voice or instrumental instruction are required to enroll in 1 unit of appropriate ensemble for each half-hour of private instruction received. Ensemble enrollments must be approved by the faculty advisor in order for them to satisfy this requirement. (Please see individual program requirements for the maximum number of ensemble units, MUS 371 – MUS 390, applicable to degree requirements.) Students must also maintain full-time enrollment in order to qualify for individual instruction. There is a limit to the total number of individual lessons each student may receive, depending on the degree program in which the student is enrolled. Students who fail or withdraw from required pre-requisite or co-requisite musicianship, theory or ensemble courses, will lose eligibility for individual applied lessons until academic requirements in those pre-requisite or co-requisite courses have been satisfied.

**Graduate Programs in Music**

The School of Music offers a Master of Arts in Music with emphases in composition, music education, or music history; and a Master of Music in Performance with emphases in vocal or instrumental performance, chamber music, or conducting (choral or instrumental).

**Professors**

Festinger, Hanna, Modirzadeh, Neve, Todorov, Woodward, Xiques

**Associate Professors**

Ginwala, Suzuki

**Assistant Professors**

Brandes, Hogarth, Sabey

**Lecturers**

Speight, Alexander String Quartet (Grafilo, Lifits, Walsh-Wilson, Yarbrough)

**Majors**

- Bachelor of Art in Music (bulletin.sfsu.edu/colleges/liberal-creative-arts/music/ba-music)
- Bachelor of Music (bulletin.sfsu.edu/colleges/liberal-creative-arts/music/bm)

**Minors**

- Minor in Music (bulletin.sfsu.edu/colleges/liberal-creative-arts/music/minor-music)
- Minor in World Music and Dance (bulletin.sfsu.edu/colleges/liberal-creative-arts/world-music-dance)

**Masters**

- Master of Arts in Music (bulletin.sfsu.edu/colleges/liberal-creative-arts/music/ma-music)
- Master of Music (bulletin.sfsu.edu/colleges/liberal-creative-arts/music/mm)

**MUS 120 Basic Music I (Units: 3)**

Fundamentals of music applied through development of basic skills in music reading, writing, listening, and singing or playing selected instruments. Open to all students without prerequisite. Topics specified in Class Schedule. May be repeated for a total of 9 units when topics vary. All sections require enrollment in live ACT class and online LEC. Classwork, 2 units; activity, 1 unit. Extra fee may be required.

**Course Attributes:**

- C1: Arts

**MUS 122 Basic Music I: Piano (Units: 3)**

Open to all students without prerequisites. Development of basic skills in music fundamentals and piano. Classwork, 2 units; activity, 1 unit. Extra fee required. [Formerly a topic under MUS 120]

This course is offered as MUS 122 and TH A 122. Students may not repeat the course under an alternate prefix.)

**Course Attributes:**

- C1: Arts

**MUS 130 Rudiments of Music Theory (Units: 3)**

Concurrent enrollment in a basic piano class recommended. Comprehensive review and drill of music fundamentals. Development of aural skills; written and analytical knowledge of simple harmony. (This course is offered as MUS 130 and TH A 131. Students may not repeat the course under an alternate prefix.)

**MUS 150 Concert Music (Unit: 0)**

Audience participation at designated on-campus concerts scheduled by the Department of Music. Required each semester of music majors.
MUS 201 Class Piano I (Unit: 1)
Prerequisites: Satisfactory performance audition; ability to read treble and bass clefs, music major or minor; priority given to Music majors, others by approval of department.

Instruction includes techniques, repertoire, and keyboard harmony. (Plus-minus letter grade only)

MUS 202 Class Piano II (Unit: 1)
Prerequisites: Satisfactory performance audition; MUS 201 or equivalent. MUS 202 is normally taken concurrently with MUS 232. Priority given to Music majors.

Laboratory. (Plus-minus letter grade only)

MUS 203 Class Piano III (Unit: 1)
Prerequisites: Satisfactory performance audition; MUS 202 or equivalent. MUS 203 is normally taken concurrently with MUS 233. Priority given to Music majors.

Laboratory. (Plus-minus letter grade only)

MUS 206 Beginning Jazz/Pop Piano (Unit: 1)
Introduction to jazz and popular piano performance: left and right-hand chord voicings, right hand improvisation, and rhythmic comping in a variety of stylistic idioms. May be repeated for a total of 3 units.
(This course is offered as MUS 206 and TH A 206. Students may not repeat the course under an alternate prefix.)

MUS 211 Class Voice I (Unit: 1)
Prerequisites: Major/minor in music (priority); major in lyric theatre; others by approval of department; ability to read music.

Foundational techniques in singing, tone production, musicianship, and interpretation. Laboratory.

MUS 212 Class Voice II (Unit: 1)
Prerequisites: Major and minor in music (priority); major in lyric theatre; others by approval of department.

Continuation of MUS 211: foundational techniques in singing, tone production, musicianship, and interpretation. Laboratory. May be repeated for credit.

MUS 221 Fundamentals of Ear Training and Musicianship I (Units: 2)
Prerequisites: Satisfactory performance audition; knowledge of written scales, key signatures, rhythms, intervals, and triads; ability to sing scales.

Ear training and sight singing. Melodic, rhythmic, and harmonic dictation. Laboratory.
(This course is offered as MUS 221 and TH A 221. Students may not repeat the course under an alternate prefix.)

MUS 222 Fundamentals of Ear Training and Musicianship II (Units: 2)
Prerequisites: Satisfactory performance audition; MUS 221 or equivalent; concurrent enrollment advised in MUS 232; priority given to music majors.

Laboratory. (Plus-minus letter grade only)

MUS 223 Fundamentals of Ear Training and Musicianship III (Units: 2)
Prerequisites: Restricted to music majors and minors; satisfactory performance audition; MUS 222 or equivalent.

Laboratory. (Plus-minus letter grade only)

MUS 224 Ear Training and Musicianship IV (Unit: 1)
Prerequisite: MUS 223 or consent of instructor.

Sight-reading, keyboard harmony and figured bass, harmonic analysis, ear training, and harmonic and rhythmic dictation.

MUS 230 Music Growth and Development in Childhood (Units: 3)
Development of fundamentals and principles for selecting, evaluating, performing, and demonstrating music materials for children; the place of music in the child's education. (Plus-minus letter grade only)

MUS 231 Contrapuntal Analysis and Synthesis (Units: 3)
Prerequisites: Restricted to Music majors and minors; satisfactory performance audition; MUS 130 or examination; concurrent enrollment advised in MUS 221 and class piano; non-majors with consent of instructor.

Contrapuntal form and procedures through written exercises, analysis, and composition in two to four parts based upon examples from the literature. (Plus-minus letter grade only)

MUS 232 Diatonic Analysis and Synthesis (Units: 3)
Prerequisites: Satisfactory performance audition; MUS 231; concurrent enrollment advised in MUS 222 and Class Piano; non-majors with consent of instructor.

Common practice harmonic and formal procedures through written exercises, analysis, and composition: triads, inversions, cadences, seventh chords, binary, ternary, and rondo forms based upon the literature. (Plus-minus letter grade only)

MUS 233 Chromatic Analysis and Synthesis (Units: 3)
Prerequisites: Restricted to Music majors and minors; satisfactory performance audition; MUS 231 and MUS 232; concurrent enrollment advised in MUS 223 and class piano; non-majors with consent of instructor.

Procedures found in chromatic music through written exercises, analysis, and composition, including secondary dominants, modulation, altered chords, theme-and-variations, and sonata forms based upon the literature. (Plus-minus letter grade only)

MUS 234 Modern Musicianship: Theory, Application and Ear Training I (Units: 3)
Examination of music notation, terminology, rhythm, scales and modes, key signatures and the circle of fifths, intervals, transposition, chords and chord progressions, figured bass, lead sheet notation, Roman numeral analysis and basic structures integrating active performance of all concepts.
(This course is offered as MUS 234 and TH A 234. Students may not repeat the course under an alternate prefix.)

MUS 235 Modern Musicianship: Theory, Application and Ear Training II (Units: 3)
Prerequisite: MUS 234.

Continuation of MUS 234. Examination of nondiatonic scales, advanced chords, chord inversions and voicings, chord substitutions, nonharmonic tones, lead sheet notation, Roman numeral analysis, and basic structures. Focus on the integration of written notation and active performance.
(This course is offered as MUS 235 and TH A 235. Students may not repeat the course under an alternate prefix.)
MUS 270 Improvisation (Units: 2)
Prerequisites: MUS 203 or MUS 206, MUS 233 with grades of C or better.

Emphasis on integrating fundamentals across styles and interdisciplinary practices. May be repeated upon advisement.

MUS 301 Class Piano IV (Unit: 1)
Prerequisites: MUS 203 or equivalent; priority given to music majors.
Intermediate class piano for voice, composition, instrumental, and music history majors. Laboratory. (Plus-minus letter grade only)

MUS 302 Class Piano V (Unit: 1)
Prerequisites: MUS 301 or equivalent; priority given to music majors.
Intermediate class piano. May be repeated for credit. Laboratory. (Plus-minus letter grade only)

MUS 303 Keyboard Major (Unit: 1)
Prerequisites: Restricted to Music majors; audition; concurrent enrollment in MUS 360.

Advanced individual projects in performance and literature for piano, harpsichord, organ, and fortepiano. May be repeated for a total of 8 units. (Plus-minus letter grade only)

MUS 307 The Singing Actor: Exploring Music through the Craft of Acting (Unit: 1)
Prerequisites: Upper division standing and by audition.

Exploration of song through the craft of acting, with a focus given to storytelling through the intersection of poetic structure and device and musical composition. (Plus-minus letter grade only)
(This course is offered as MUS 307 and TH A 307. Students may not repeat under alternate prefix.)

MUS 309 Singing for Self Expression I (Unit: 1)
Prerequisite: Upper division standing or consent of instructor.

Basic elements of vocal technique. Analysis of individual problems and corrective vocalises. Breath control, tone production, placement, phonetics in group and individual practice and performance; special needs of self-presentation.

MUS 313 Voice Major (Unit: 1)
Prerequisites: Music and Drama majors; audition; and/or concurrent enrollment in MUS 150, MUS 394, a vocal or choral ensemble as assigned; approval of department. B.A. students must have completed lower division preparation.

Vocal study for the music degree. May be repeated for a total of 8 units for music performance majors; for other majors, may be repeated for a total of 2 units. (Plus-minus letter grade only)
(This course is offered as MUS 313 and TH A 318. Students may not repeat the course under an alternate prefix.)

MUS 335 Rehearsal and Performance Technique (Unit: 1)
Prerequisite: By audition.

In depth exploration of character psychology, social political context and musical theatrical detail necessary for a successful opera production. Principally devoted to staging and advancement of student stagecraft. May be repeated for a total of 4 units. (CR/NC grading only)

MUS 351 Class Orchestral and Band Instruments I (Unit: 1)
Prerequisites: Music majors and minors; ability to read music; others by consent of department.

Fundamentals in embouchure, fingering, articulation, breath control, and hand position. Topics to be specified in Class Schedule. May be repeated with varying content.

MUS 353 Instrumental Major (Unit: 1)
Prerequisites: Restricted to music major; consent of department; and concurrent enrollment in MUS 150 and MUS 371, MUS 372, or MUS 377 (for guitarists) as assigned.

Applied Instruction on instrument or voice. Topics to be specified in Class Schedule. May be repeated for a total of 8 units as topics vary.

MUS 360 Major Repertoire (Unit: 1)
Prerequisites: Restricted to music major; audition; and consent of department.

In-depth survey of repertoire for one instrument or voice. Topics to be specified in Class Schedule. One topic may be repeated 8 times.

MUS 371 Orchestra (Unit: 1)
Prerequisite: Audition.

Major orchestral ensemble for qualified musicians. May be repeated for a total of 8 units.

MUS 372 Wind Ensemble (Unit: 1)
Prerequisite: Audition.

Major performance ensemble for woodwind, brass, and percussion players. Rehearsal and performance of a broad range of wind and percussion repertoire. Open to all students by audition. May be repeated for a total of 8 units.

MUS 373 Chamber Singers (Unit: 1)
Prerequisite: Audition.

Sacred and secular music for vocal chamber ensemble. Open to all students by audition. May be repeated for a total of 8 units.

MUS 375 Treble Singers "The Higher Ups" (Unit: 1)
Prerequisite: Audition.

Preparation and performance of repertoire for treble (soprano, alto) voices. May be repeated for a total of 8 units. (Plus-minus letter grade only)

MUS 376 Opera Workshop (Unit: 1)
Prerequisite: Audition.

Preparation and performance of opera scenes or opera production. May be repeated for a total of 8 units.

MUS 377 Instrumental Ensembles (Unit: 1)
Prerequisite: Audition.

Preparation and performance of literature for specific woodwind, brass, percussion, or string ensembles. Ensemble to be specified in Class Schedule. May be repeated for a total of 8 units.

MUS 378 Chamber Music (Unit: 1)
Prerequisite: Audition.

Preparation and performance of chamber music literature by advanced students in small ensembles. May be repeated for a total of 8 units.
MUS 379 University Chorus (Unit: 1)
Prerequisite: Audition.
Sacred and secular music for large chorus, including masterworks with orchestra. Sight-reading instruction as needed for 2 units of credit. Open to all students by audition. May be repeated for a total of 8 units.

MUS 381 Men's Chorus (Unit: 1)
Prerequisite: Placement audition.
Preparation and performance of repertoire for tenor, baritone and bass voices. May be repeated for a total of 8 units.

MUS 382 Keyboard Harmony (Unit: 1)
Prerequisites: MUS 232 and MUS 303 or equivalent.
Intensive one-semester accelerated course in applied figured-bass realization, open-score reading, and transposition for piano majors. Laboratory.

MUS 383 Piano Accompaniment (Unit: 1)
Prerequisite: Audition.
Development of accompaniment skills through preparation and performance of selected vocal and instrumental literature. May be repeated once.

MUS 384 Piano Ensemble (Unit: 1)
Prerequisite: Audition.
Preparation and performance of selected works for two pianos and one piano/four hands. May be repeated.

MUS 385 Applied Accompanying (Unit: 1)
Prerequisite: MUS 383 or consent of instructor.
Practical experience in applied piano accompaniment to be attained by assignment, based on experience and level of ability, to individual studio lessons in the vocal and instrumental area or to various ensembles in music. May be repeated for a total of 8 units.

MUS 386 World Music Ensembles (Unit: 1)
Prerequisite: Audition performance on an instrument or voice.
Two to eight piece interactive performance groups drawing musical traditions: Africa, Middle East, India, Asia, Europe, Americas. Intercultural practice is encouraged. Topics to be specified in Class Schedule. May be repeated for 12 units for degree credit as topics vary.

MUS 387 Collegium Musicum: Schola Civilis (Unit: 1)
Prerequisite: Audition or consent of instructor.
Practical study of Gregorian Chant: practice in singing a varied selection of chant repertoire; perform chant in the context of a Latin Mass; development of historically informed performance style of Gregorian Chant; acquire knowledge of theoretical background to chant. May be repeated for a total of 6 units.

MUS 388 Jazz Combos (Unit: 1)
Prerequisite: Audition.
Two- to eight-piece interactive performance groups in a variety of styles, including Blues-R&B, Swing, Bop and Straight-ahead, model-free, Rock Fusion, Gospel, Afro-Cuban, Creative World, and Vocal. Topics to be specified in Class Schedule. May be repeated for a total of 12 units.

MUS 389 Jazz Band (Unit: 1)
Prerequisites: Audition; MUS 430 and MUS 440 or consent of instructor.
Eighteen to twenty piece group consisting of saxophone, trumpet, trombone, and rhythm sections; arrangement realization and improvisation in all styles. May be repeated for a total of 8 units.

MUS 390 Piano Sightreading (Unit: 1)
Prerequisite: Piano major or audition.
Broad and systematic approach to the skills needed to sightread at a reasonable speed. May be repeated for a total of 2 units.

MUS 391 Piano Performance Practicum (Unit: 1)
Prerequisite: Piano performance major or audition.
Performance in the classroom setting. Technical problems and performance practice of standard concert repertoire. May be repeated for a total of 8 units.

MUS 392 Vocal Performance Practicum (Unit: 0)
Prerequisites: Vocal performance major; must be taken concurrently with MUS 313, MUS 360, MUS 776 and/or MUS 780.
Performance in the classroom setting. Technical problems and performance practice of standard vocal repertoire. May be repeated 8 times.

MUS 394 Vocal Performance Practicum (Unit: 1)
Prerequisite: Concurrent enrollment in chamber music or consent of instructor.
Performance in the classroom setting. Technical problems and performance practice of chamber music repertoire. May be repeated for a total of 8 units.

MUS 395 Vocal Jazz/Modern Music (Unit: 1)
Prerequisite: Audition.
Two- to eight-piece interactive groups in a variety of styles. May be repeated for a total of 12 units. [Formerly a topic under MUS 388]
(This course is offered as MUS 395 and TH A 395. Students may not repeat the course under an alternate prefix.)

MUS 396 Chamber Music Forum (Unit: 1)
Prerequisite: Piano performance major or audition.
Performance in the classroom setting. Technical problems and performance practice of standard vocal repertoire. May be repeated for a total of 8 units.

MUS 397 University Chorus (Unit: 1)
Prerequisite: Audition or consent of instructor.
Music performance in MUS ensemble (wind ensemble, orchestra, university chorus, jazz band, etc.) practice as it relates to a variety of genres, styles, settings, historical periods and instrumentations. Online coursework, 2 units: analysis of performance practices and settings; 1 unit: performance-related activities. May be repeated for a total of 6 units. Auditions held the first week of the semester.

Course Attributes:
- UD-C: Arts and/or Humanities
MUS 405 Tonal Counterpoint (Units: 3)
Prerequisite: MUS 233.
Contrapuntal practices of the 18th century through written exercises in two- and three-parts based on analysis of examples from the literature. (Plus-minus letter grade only)

MUS 415 Orchestration (Units: 3)
Prerequisite: MUS 233.
Characteristics of modern orchestral instruments and the orchestralization styles and techniques of the 18th, 19th, and 20th centuries. Representative scores from the literature and assignments in scoring for various instrumental ensembles. (Plus-minus letter grade only)

MUS 416 Theory Seminar (Units: 3)
Prerequisite: MUS 420.
Advanced analysis of musical works from specific periods or genres. Topic to be specified in Class Schedule. May be repeated when topics vary. (Plus-minus letter grade only)

MUS 420 20th Century Techniques (Units: 3)
Prerequisite: MUS 233.
Compositional procedures and musical structures of the 20th century through studies of the literature and composition. (Plus-minus letter grade only)

MUS 425 Composition Workshop (Unit: 1)
Prerequisites: MUS 420 (may be taken concurrently) and consent of instructor.
Free compositional work under supervision of instructor. Preparation of works for performance at a student recital. Analytical presentations of original works. May be repeated for a total of 5 units; only 1 unit counts in the major.

MUS 430 Improvisation (Units: 2)
Prerequisites: MUS 203 or MUS 206 and MUS 233 with a grade of C or better.
Emphasis on integrating improvisation techniques with music fundamentals across styles and practices. Classwork, 1 unit; activity, 1 unit. May be repeated for a total of 4 units.

MUS 431 Jazz Improvisation I (Units: 2)
Prerequisite: MUS 270 with a grade of C or better.
Study and application of jazz improvisation concepts utilizing extended harmonic approaches, quartalism, linear chromaticism, and advanced cross-rhythm sensibility. Structures used are primarily the blues and standard tunes. May be repeated for a total of 4 units.

MUS 432 Jazz Improvisation II (Units: 2)
Prerequisite: MUS 431.
Review and application of jazz improvisation concepts utilizing extended harmonic approaches, quartalism, linear chromaticism, and advanced cross-rhythm sensibility. Structures used are modern jazz standards. May be repeated for a total of 4 units.

MUS 433 Introduction to Music Technology (Units: 2)
Prerequisites: Familiarity with computers; ability to read music in two clefs; and consent of instructor. Enrollment priority given to music majors.
Basic MIDI protocol; synthesizer programming, sequencing, digital editing, and notation.

MUS 434 Introduction to Sound for Games (Units: 3)
Prerequisites: Restricted to upper division BECA or MUS majors, non-majors by consent of instructor. MUS 433 or familiarity with any digital audio workstation.
Training in the techniques used in designing sound for various types of video games and immersive environments. Analysis of theoretical topics in the history and development of modern video game and virtual reality audio design. (This course is offered as MUS 434 and BECA 434. Students may not repeat the course under an alternate prefix.)

MUS 436 Introduction to the Electronic Music Studio (Units: 2)
Prerequisite: MUS 504 or equivalent preparation.
Operation of digital electronic music equipment, including use of computers in controlling electronic musical instruments.

MUS 437 Fundamentals of Computer Music (Units: 2)
Prerequisites: MUS 436 and MUS 504 or equivalent preparation.
Theories and issues in software-based digital audio signal analysis, processing, and synthesis. Software synthesis and control techniques in creating original musical compositions.

MUS 438 Fundamentals of Computer Music (Units: 2)
Prerequisites: MUS 436 and MUS 504 or equivalent preparation.

MUS 439 Jazz Harmony (Units: 3)
Prerequisites: MUS 203 or MUS 206 and MUS 233 with a grade of C or better.
Notation and realization of harmony in jazz music. Standard chord progressions and lead sheet symbols. (Plus-minus letter grade only.)

MUS 440 Jazz Composing (Units: 2)
Prerequisite: MUS 440.
Major jazz compositional practices, including review and application of form, harmonic and linear progression as developed through jazz masterworks of the 20th century. Composers' scores and transcribed improvisations, as well as student works. (Plus-minus letter grade only.)

MUS 441 Jazz Composition and Arranging (Units: 3)
Prerequisite: MUS 440.
Study and application of jazz improvisation concepts utilizing extended harmonic approaches, quartalism, linear chromaticism, and advanced cross-rhythm sensibility. Structures used are modern jazz standards. May be repeated for a total of 4 units.

MUS 442 Jazz Composing (Units: 2)
Prerequisite: MUS 420.

MUS 443 Music, Ideas, and Culture (Units: 3)
Prerequisite: ENG 214.
Functions of music in diverse social and cultural traditions; relation to other arts and disciplines. Writings of philosophers, critics, musicologists and musicians about music. (This course is offered as HUM 350 and MUS 446. Students may not repeat the course under an alternate prefix.)

Course Attributes:
- UD-C: Arts and/or Humanities

MUS 445 Creative Concepts in Music (Units: 2)
Prerequisite: MUS 430 or consent of instructor.
The role of musical creativity in cognitive, cultural, political and socio-historical terms, is examined in relation to the imaginative, original, eclectic, experimental, and innovative, as expressed by a number of select musical artists, their times, and masterworks.

MUS 446 Music, Ideas, and Culture (Units: 3)
Prerequisite: ENG 214.
Functions of music in diverse social and cultural traditions; relation to other arts and disciplines. Writings of philosophers, critics, musicologists and musicians about music. (This course is offered as HUM 350 and MUS 446. Students may not repeat the course under an alternate prefix.)

Course Attributes:
- UD-C: Arts and/or Humanities

MUS 450 Projects in Theory and Composition (Unit: 1)
Prerequisites: Junior standing; music major; MUS 420 and MUS 425; must be taken concurrently with MUS 460; or consent of instructor;
Supervised study of composition and theoretical problems and preparation of works for performance. May be repeated for a total of 4 units. (Plus-minus letter grade only)
MUS 451 Training in Form and Structure of Music Scoring for Video Games and Immersive Environments (Units: 2)
Prerequisites: Restricted to upper division Music majors; MUS 433 and MUS 434.
Composition of music for a variety of game play styles and forms using digital audio workstations, audio middleware and game engines as well as recordings of live performers. Training in the form and structure of music scoring for video games and immersive environments. Examination of theoretical distinctions between games and linear media.

MUS 453 Advanced Training in Form and Structure of Music Scoring for Video Games and Immersive Environments (Units: 2)
Prerequisites: Restricted to upper division Music majors; MUS 415, MUS 433, MUS 434, and MUS 451.
Advanced training in the form and structure of music scoring for video games and immersive environments. Composition for and recording, mixing and editing of large live performance ensemble for integration within a game.

MUS 460 Repertoire for Composers (Unit: 1)
Prerequisites: Junior standing; music major; MUS 420; must be taken concurrently with MUS 425 and MUS 450; or consent of instructor.
Literature associated with the study of MUS 450 as required for the Bachelor of Music. May be repeated for a total of 4 units. (Plus-minus letter grade only)

MUS 477 Music Business: Career Management in Music (Units: 3)
Prerequisite: Upper division standing.
An overview of the music business including songwriting, publishing, live performance, recording, merchandising, and licenses. Exploration of music industry career paths such as arts management, music products and merchandizing, public relations, music production and recording, publishing, and online music distribution.

MUS 501 Music, The Listener's Art (Units: 3)
Prerequisite: Upper division standing or consent of instructor.
Music literature in historical/cultural contexts. Skills and techniques of analytical listening and the reading of simple scores.

MUS 502 The Opera (Units: 3)
Prerequisite: Upper division standing or consent of instructor.
Synthesis of drama, music, scenery, costume, and dance in opera. Development of the genre in Italy, France, England, and Germany showing how it differed from one country to the next due to linguistic and theatrical traditions.

MUS 504 Survey of Electronic Music (Units: 3)
Prerequisite: Upper division standing.
Materials and methodology of electronic music as a contemporary art form. Literature of electronic music and related theoretical issues drawn from the fields of physics, acoustics, psychoacoustics, and digital audio, including the MIDI communication protocol.

MUS 505 Music of the World’s Peoples (Units: 3)
Prerequisite: Upper division standing or consent of instructor.
Non-Western music and arts, studied within their socio-cultural context. Autochthonous, folk, and classical music in societal context as art forms. Lecture, discussion, and guided listening, enhanced by selected audio-visual presentations and readings.
Course Attributes:
- UD-C: Arts and/or Humanities
- Global Perspectives

MUS 506 Survey of Jazz (Units: 3)
Prerequisite: Upper division standing or consent of instructor.
Jazz from early ragtime to the present. Musical-social-economic history of jazz and its interaction with classical and rock musics.
Course Attributes:
- U.S. History
- UD-C: Arts and/or Humanities
- Am. Ethnic & Racial Minorities

MUS 507 Jazz and Blues in Film (Units: 3)
Prerequisite: Upper Division Standing
Survey of the history and impact of jazz and blues on the Hollywood film industry from the early "soundies" and "The Jazz Singer" to modern day blockbusters. Noted jazz composers such as Henry Mancini, Quincy Jones, and Olive Nelson will be included, as well as works by jazz-influenced composers of the 1970's film era, such as Marvin Gaye, Isaac Hayes, and Melba Liston.
(This course is offered as MUS 507, HUM 321, and TH A 507. Students may not repeat the course under an alternate prefix.)
Course Attributes:
- UD-C: Arts and/or Humanities
- Am. Ethnic & Racial Minorities

MUS 508 Modern Music: American Iconoclasts (Units: 3)
Prerequisites: Upper division standing and satisfaction of Graduation Writing Assessment Requirement (GWAR).

MUS 509 Historical Performance: Keyboard Practices (Units: 3)
Prerequisites: MUS 303 and MUS 360, or consent of instructor.
Historical review of keyboard performance practices of the Venetian, Roman, and English schools of the mid-late Renaissance and early Baroque eras; period improvisation, continuo realization and accompaniment; works of mid-Baroque French masters and clavecin school of the late seventeenth and early eighteenth century; cembalo repertoire of the late Baroque and pre-Classical periods. Maybe repeated for a total of 6 units.

MUS 510 Keyboard Literature (Units: 3)
Prerequisite: Upper division standing or consent of instructor.
Music from 16th to 20th centuries viewed through a survey of piano, harpsichord, and organ literature. Required for majors in piano but open to other qualified students.
MUS 511 The Roots of Rock (Units: 3)
Prerequisite: Upper division standing or consent of instructor.

Popular music as a reflection of American culture; folk and ethnic roots, regionalism, commercialism; influence of technology; country, rhythm and blues, rock. Topics include general aspects of early rock development or focus on a particular early rock group or performer. Topic to be specified in Class Schedule. May be repeated for a total of 6 units as topics vary.

MUS 512 Rock Since the Mid-1960s (Units: 3)
Prerequisite: Upper division standing or consent of instructor.

An examination of developments in Rock from the mid-1960s to the early 1980s: significant styles, social impact of styles, and the influence of electronic technology, with an emphasis on mid-60s to early 70s styles as being foundational. Lectures, readings, and recordings are used to familiarize students with the history and stylistic development of rock music.

MUS 520 Seminar in Music Literature (Units: 3)
Prerequisite: Satisfaction of Graduation Writing Assessment Requirement (GWAR).

Group study of music literature of specific periods, genres or styles. Topic to be specified in Class Schedule. May be repeated when topics vary.

MUS 530 Musics of the Middle East and India (Units: 3)
Prerequisite: Upper division standing or consent of instructor.

Musical cultures of Iran, Turkey, and the Arab world, including North Africa, Central Asia, and Indian sub-continent. Traditional instruments, concepts, and contexts of music making. Students may substitute this course for MUS 520 as preparation for MUS 598.

Course Attributes:
- UD-C: Arts and/or Humanities
- Global Perspectives

MUS 531 Musics of North and Southeast Asia (Units: 3)
Prerequisite: Upper division standing or consent of instructor.

Musical cultures of Japan, Korea, China, Philippines, Vietnam, Cambodia, Thailand, Burma, Malaysia, Indonesia, as well as Australia and Pacific Oceania. Traditional instruments, concepts, and contexts of music making. Students may substitute this course for MUS 520 as preparation for MUS 598.

MUS 532 Music of Latin America (Units: 3)
Prerequisite: Upper division standing or consent of instructor.

Musical cultures of Central and South America, including Caribbean. Socio-historical events related to contexts of music-making, instruments, and various genres. Students may substitute this course for MUS 520 as preparation for MUS 598.

MUS 542GW Music in Culture and Context - GWAR (Units: 3)
Prerequisites: Upper division standing; music majors only; ENG 214 or equivalent with a grade of C or better.

Development of research and writing skills, focusing on critical concepts and issues that shape the practice and perception of musical expression within social, cultural, historical, and/or artistic contexts. (ABC/NC grading only)

Course Attributes:
- Graduation Writing Assessment

MUS 545 Traditional Kulintang Music and Dance of the Southern Philippines (Units: 3)
Prerequisite: Upper division standing or consent of instructor.

Music and dance of Southern Philippines, emphasis on Kulintang tradition of Mindanao and Sulu Archipelago. Lectures and hands-on workshops on dance movement and music of Kulintang culture. May be repeated for a total of 6 units.

MUS 550 Music from the Middle Ages to 1750 (Units: 3)
Prerequisites: MUS 233 and satisfaction of Graduation Writing Assessment Requirement (GWAR).

From Gregorian Chant through the death of Bach. Music of the Medieval, Renaissance, and Baroque eras involving stylistic and formal analysis. Examples from literature are related to performance practices of each period. Intended for music majors and minors. (Plus-minus letter grade only)

MUS 551 Classic and Romantic Music (Units: 3)
Prerequisites: MUS 233 and satisfaction of Graduation Writing Assessment Requirement (GWAR).

Classical and Romantic periods through the beginning of the 20th century. Historical performance techniques. (Plus-minus letter grade only)

MUS 552 20th Century Music (Units: 3)
Prerequisites: MUS 233, MUS 551, and satisfaction of Graduation Writing Assessment Requirement (GWAR).

Evolution of the major trends of musical thought from the late 19th century to the present. Stylistic and formal analysis of representative music literature. Intended for music majors and minors. (Plus-minus letter grade only)

MUS 558 Music of John Coltrane (Units: 3)
Prerequisite: MUS 506.

Life and music of saxophonist/composer John Coltrane within related socio-historical contexts of jazz in 20th century America. In-class listening/analysis. (ABC/NC grading only)

Course Attributes:
- UD-C: Arts and/or Humanities
- Am. Ethnic & Racial Minorities

MUS 559 Women in Jazz (Units: 3)
Prerequisite: MUS 506 or consent of instructor.

The role of women in the history of jazz. [Formerly a topic under MUS 558]

(Formerly a topic under MUS 558)

Course Attributes:
- U.S. History
- UD-C: Arts and/or Humanities
- Am. Ethnic & Racial Minorities
MUS 560 Lyric Diction I (Units: 2)
Prerequisite: Upper division standing or consent of instructor.
A systematic study of Italian, Latin, and Spanish signing pronunciation using the International Phonetic Alphabet. Intended for voice majors and music educators. (Plus-minus letter grade only)

MUS 561 Lyric Diction II (Units: 2)
Prerequisite: MUS 560 or consent of instructor.
A systematic study of German and French singing pronunciation using the International Phonetic Alphabet. Intended for voice majors and music educators. (Plus-minus letter grade only)

MUS 565 Vocal Literature (Units: 3)
Prerequisites: MUS 550, MUS 551, or MUS 552.
Vocal literature from the 16th century to the present. History, style, and performance practices. Required for majors in voice, but open to other qualified students. (Plus-minus letter grade only)

MUS 598 Senior Thesis (Units: 3)
Prerequisites: MUS 520 and satisfaction of Graduation Writing Assessment Requirement (GWAR).
Development and completion of the senior thesis and, as appropriate, public presentation of the results of that creative work. Bibliographical and stylistic techniques requisite to the organization and presentation of research projects.

MUS 600 Music Internship (Units: 3)
Prerequisites: Restricted to upper division music major and minor, or consent of instructor.
Practical field experience with employers in the music industry. May be repeated for a total of 12 units. (CR/NC only)

MUS 601 Music for Children (Units: 3)
Prerequisite: Upper division standing or consent of instructor.
Musical materials, concepts, and skills appropriate for use in elementary classrooms. Music fundamentals applied through development of basic skills on an instrument: guitar, recorder, or piano.

MUS 608 Early Field Experience in Music Education (Units: 2)
Prerequisite: Upper division standing.
Provides 45 hours of observation and participation in school music classes at elementary, middle, and high schools. Classwork, 1 unit; fieldwork, 1 unit. (Plus-minus letter grade only)

MUS 610 General Music (Units: 3)
Prerequisite: Upper division standing.
Materials and methods for teaching music in general music classes. (Plus-minus letter grade only)

MUS 612 The Voice (Units: 3)
Prerequisite: Upper division standing or consent of instructor.
Physiological and psychological mechanics of singing. Techniques of vocal instruction and comparative methods of developing vocal techniques and repertoire. Intended for music majors and minors. (Plus-minus letter grade only)

MUS 614 Piano Pedagogy (Units: 2)
Prerequisite: Piano major or audition.
Problems in teaching piano: elements of technique, theory and sight-reading, performance and analysis of teaching materials, class procedures and methods.

MUS 616 Woodwinds (Units: 2)
Prerequisite: Consent of department.
Individual and class instruction involving techniques and performance problems of flute, clarinet, oboe, bassoon, and saxophone. Laboratory.

MUS 618 Strings (Units: 2)
Prerequisite: Consent of department.
Individual and class instruction involving techniques and performance problems of violin, viola, violoncello, and string bass. Laboratory. Extra fee required.

MUS 620 Brass Instruments (Units: 2)
Prerequisite: Consent of department.
Individual and class instruction involving techniques and performance problems of horn, trumpet, trombone, baritone, and tuba. Laboratory.

MUS 640 Ensemble Conducting (Units: 2)
Prerequisite: MUS 232 or equivalent.
Fundamentals of conducting and score-reading; standard patterns, stick technique and conducting gestures used with choral and instrumental ensembles.

MUS 644 Advanced Instrumental Conducting and Literature (Units: 3)
Prerequisites: Upper division standing; MUS 415, MUS 640.
Elements of conducting with instrumental laboratory experience; director’s responsibility and rehearsal methods; selection of literature for wind, string, percussion ensembles in K-12 schools. (Plus-minus letter grade only)

MUS 645 Advanced Choral Conducting and Literature (Units: 3)
Prerequisites: Upper division standing and MUS 640.
Elements of conducting with choral laboratory experience; director’s responsibility and rehearsal methods; selection of literature for children’s voices, adolescent voices, men’s and women’s choirs. (Plus-minus letter grade only)

MUS 699 Independent Study in Music (Units: 1-3)
Prerequisites: Upper division standing, consent of the instructor, and approval of the student's adviser.
Independent study, under supervision of a staff member selected by the student, of some aspect of the field not covered by regular courses. May be repeated with consent of instructor, the adviser, and the department chair. No more than 3 units can be taken during any one semester.

MUS 700 Introduction to Graduate Study (Units: 3)
Prerequisites: Graduate standing or consent of instructor; priority given to music majors.
Use and evaluation of major bibliographic materials, including primary and secondary sources; techniques of research through development of individual projects. (Plus-minus letter grade only)
MUS 701 Graduate Seminar in Music (Units: 3)
Prerequisite: Graduate standing.
Research seminar on topics in music history and theory. Topic to be specified in Class Schedule. May be repeated when topics vary.

MUS 710 Advanced Analysis (Units: 3)
Prerequisites: Graduate standing in Music; MUS 700 and completion of all theory remediation; must be taken within the first 2 semesters of study.
Seminar on analytical techniques and their application to in-depth study of major works from the literature of the 17th, 18th, 19th, and 20th centuries. (Plus-minus letter grade only)

MUS 716 Graduate Theory Seminar (Units: 3)
Prerequisites: Restricted to graduate level music students; MUS 710 or consent of instructor;
Seminar on analytical techniques and their application to in-depth study of major works written after 1950. May be repeated when topics vary. (Plus-minus letter grade only)

MUS 720 Directed Projects in Theory or Composition (Unit: 1)
Prerequisites: Graduate standing; must be taken concurrently with MUS 725; or consent of instructor.
Directed individual studies with faculty supervision in composition or theory. May be repeated for a total of 4 units.

MUS 724 Issues in Ethnomusicology (Units: 2)
Prerequisite: Graduate standing in Art or consent of instructor.
Historical issues in ethnomusicology examined through assigned readings in the field; interdisciplinary range of focus includes music and identity, theory and methodology, gender and cross-cultural studies. May be repeated for a total of 4 units. (Plus-minus letter only)

MUS 725 Practicum in Composition (Unit: 1)
Prerequisites: Graduate standing; must be taken concurrently with MUS 720 and MUS 730; or consent of instructor.
Directed individual studies with faculty supervision in advanced orchestration; 20th century styles and practices; problems in scoring and analysis. May be repeated for a total of 4 units.

MUS 730 Composition Workshop (Unit: 0)
Prerequisites: Graduate standing in music; must be taken concurrently with MUS 720 and MUS 725.
Analytical presentations of original works, analysis of new compositions, and participation in critical discussion of presentations. Required each semester of matriculating graduate music composition majors. (CR/NC grading only)

MUS 751 The Renaissance (Units: 3)
Prerequisite: MUS 550.
Historical and analytical study of the works of a single composer, style, or special repertoire from the Renaissance period. (Plus-minus letter grade only)

MUS 752 The Baroque (Units: 3)
Prerequisites: MUS 700, and either successful completion of the appropriate portion of the graduate classification exam in music history or MUS 550.
Graduate seminar focused on detailed historical and analytical study of the works of a single composer, style, or special repertoire from the baroque period. (Plus-minus letter grade only)

MUS 753 The Classical Era (Units: 3)
Prerequisites: MUS 700, and either successful completion of the appropriate portion of the graduate classification exam in music history or MUS 551.
Graduate seminar focused on detailed historical and analytical study of the works of a single composer, style, or special repertoire from the classical period. (Plus-minus letter grade only)

MUS 754 The Romantic Era (Units: 3)
Prerequisites: MUS 700, and either successful completion of the appropriate portion of the graduate classification exam in music history or MUS 551.
Graduate seminar focused on detailed historical and analytical study of the works of a single composer, style, or special repertoire from the romantic period. (Plus-minus letter grade only)

MUS 755 The Twentieth Century (Units: 3)
Prerequisites: MUS 700, and either successful completion of the appropriate portion of the graduate classification exam in music history or MUS 552.
Graduate seminar focused on detailed historical and analytical study of the works of a single composer, style, or special repertoire from the 20th and 21st centuries. (Plus-minus letter grade only)

MUS 760 Curriculum and Instruction I: Music (Units: 3)
Prerequisites: Graduate standing or subject matter waiver for music education; must be taken concurrently with S ED 660.
Principles and practices of curriculum planning and instruction in music for students in grades K-12. (Plus-minus letter grade only)

MUS 761 Curriculum and Instruction II: Music (Units: 3)
Prerequisites: Graduate standing or subject matter waiver for music education; must be taken concurrently with S ED 660.
Principles and practices of curriculum planning and instruction in music for students in grades K-12. (Plus-minus letter grade only)

MUS 776 Directed Projects in Performance (Units: 2)
Prerequisites: Music majors only; must be concurrently enrolled in a related performance course or participation in related ensembles as assigned by supervisor; consent of department and supervising faculty.
Graduate individual projects in performance and literature for piano, voice, orchestral and band instruments. Topics to be specified in Class Schedule. May be repeated for a total of 6 units.

MUS 778 Chamber Music Performance (Unit: 1)
Prerequisite: Audition.
Open to graduate performance majors. Preparation and performance of major works of chamber music literature. May be repeated for a total of 8 units.
MUS 780 Graduate Major Repertoire (Units: 2)
Prerequisite: Consent of department.
Study of solo music repertoire on a particular instrument or voice. Topics to be specified in Class Schedule. May be repeated when topics vary.

MUS 781 Choral Conducting (Units: 2)
Prerequisite: Consent of department.
Directed individual projects in choral conducting. Evaluation and selection of appropriate choral literature. Rehearsal techniques. May be repeated for a maximum of six units.

MUS 782 Instrumental Conducting (Units: 2)
Prerequisite: Consent of department.
Directed individual projects in instrumental conducting. Evaluation and selection of appropriate band and orchestral literature. Rehearsal techniques. May be repeated for a maximum of 8 units. (Plus-minus letter grade only)

MUS 821 Research in Music Education (Units: 3)
Prerequisite: Consent of graduate major advisor.
Seminar in past and current research in music education. Techniques and instruments appropriate for research. Problems in designing and implementing research projects. (Plus-minus letter grade only)

MUS 822 Designing Curricula in Music (Units: 3)
Prerequisite: MUS 821.
Developing music units, courses, or curricula based on strong rationale and educational objectives, with intended learning outcomes, sequence, and evaluation; analyzing current practices and curricular materials. (Plus-minus letter grade only)

MUS 852 Directed Fieldwork in Music (Units: 1-3)
Prerequisites: Music majors only; consent of graduate major adviser and supervising instructor.
Directed research, observation, or experience in a specific area of graduate concentration. May be repeated for a total of 6 units.

MUS 894 Creative Work Project (Units: 3)
Prerequisites: Consent of instructor and approval of Advancement to Candidacy (ATC) and Culminating Experience (CE) forms by Graduate Studies.
Recital or creative project presented by the student under faculty supervision as a culmination of study for the Master of Music in Performance or Master of Arts in Music. ATC and Proposal for Culminating Experience Requirement forms must be approved by the Graduate Division before registration. (CR/NC; RP grading only)

MUS 898 Master’s Thesis (Units: 3)
Prerequisites: Consent of instructor and approval of Advancement to Candidacy (ATC) and Culminating Experience (CE) forms by Graduate Studies.
Research, creative project, or recital presented by the student under faculty supervision as a culmination of study for the Master of Music or Master of Arts in Music. ATC and Proposal for Culminating Experience Requirement forms must be approved by the Graduate Division before registration. (CR/NC grading only)

MUS 899 Independent Study (Units: 2)
Prerequisite: Consent of graduate major adviser and supervising faculty member.
Study is planned, developed, and completed under the direction of a member of the departmental faculty. Enrollment by petition. May be repeated. (Plus-minus letter grade only)