SMHM 5860. Strategic Management in the Hospitality Industry. 3 hours. Application and exploration of critical issues associated with the hospitality strategic management process. Topics include the hospitality industry internal and external contexts of strategic planning and execution; growth and competitive advantage strategies for hospitality organizations; organizational resource and capability analysis; prevention and management of crisis situations in the hospitality industry including food-borne diseases and the impact of natural disasters on the tourism industry; entrepreneurial strategies for electronic tourism; and global strategic management for hospitality corporations. Cases of hospitality-specific companies, readings, and lectures/discussions are utilized.

SMHM 5900-SMHM 5910. Special Problems in Various Areas of Concentration. 3 hours each. Arranged. Prerequisite(s): consent of instructor.

SMHM 5920. Problem in Lieu of Thesis. 3 hours. No credit given until problem in lieu of thesis is completed.

SMHM 5950. Master's Thesis. 3 or 6 hours. To be scheduled only with consent of department. 6 hours credit required. No credit assigned until thesis has been completed and filed with graduate dean. Continuous enrollment required once work on thesis has begun. May be repeated for credit.

**Middle School Education**

*see Undergraduate Catalog*

**Military Science**

*see Undergraduate Catalog*

**Music**

MUAG — Music Applied General Courses
MUAM — Music Applied Private Lessons (Major)
MUAC — Music Applied Private Lessons (Concentration)
MUAS — Music Applied Private Lessons (Secondary)
MUCM — Chamber Music
MUCP — Music Composition
MUED — Music Education
MUEN — Music Ensembles
MUET — Music Ethnomusicology
MUGC — Music General Courses
MUMH — Music History and Literature, and Musicology
MUJS — Music Jazz Studies
MULB — Music Laboratories
MUSM — Sacred Music
MUTH — Music Theory

Courses that may be repeated for credit are MUAG 5000, MUAG 5210, MUAG 5390, MUAG 5640, MUAG 5650, MUAG 5660, MUAG 5800, MUAG 5810, MUAG 5850, MUAG 5860, MUAG 5890 and MUAG 6850; all courses in MUAM, MUAC and MUAS; all courses in MUCM; MUCP 5180, MUCP 5190, MUCP 6190, MUCP 6200 and MUCP 6400; MUED 5300, MUED 5821, MUED 5822, MUED 5823, MUED 5831, MUED 5832, MUED 5840, MUED 5880 and MUED 6480; all courses in MUEN; MUET 5210; MUJS 5470 and MUSJ 5760; all courses in MULB; MUMH 5711, MUMH 6160, MUMH 6520, MUMH 6530 and MUMH 6540; MUTH 5001, MUTH 5002, MUTH 5003, MUTH 5090 and MUTH 6680; and MUGC 5890, MUGC 5900-MUGC 5910, MUGC 5930, MUGC 5950, MUGC 6900-MUGC 6910 and MUGC 6950.

**Applied General Courses, Music, MUAG**

MUAG 5000. Choral Techniques. 3 hours. Choral organizations, singing, conducting, performing, repertoire and history. Actual experience in a model a cappella choir.

MUAG 5210. Studies in Vocal Literature. 2 hours. An intensive study of a style period or genre of solo vocal literature. May be repeated for credit as topics vary.

MUAG 5220. Advanced Singing-Acting Techniques. 1 hour. Working with the techniques of H. Wesley Balk, the course develops singing/acting skills that integrate the full system of each student. An experiential learning course in which the student applies the techniques to his or her individual operatic repertoire or assigned scenes from opera. Prerequisite(s): acceptance into the graduate program or artist's certificate. Must have at least three operatic arias in personal repertoire. Highly recommended to be taken before MUAG 5640.

MUAG 5260. Piano Collaboration (Vocal). 3 hours. Skills and techniques of vocal collaboration through study and performance with soloists of art song and vocal repertoire with orchestral reduction; study of relevant reference works; sight-reading, transposition, coaching and teaching collaborative skills. Prerequisite(s): consent of instructor.

MUAG 5261. Vocal Repertoire Master Class. 3 hours. Intensive study and performance of art song with piano and other vocal repertoire with orchestral reduction. Prerequisite(s): MUAG 5260, MUAM 5503, or consent of instructor. May be repeated for credit.

MUAG 5270. Piano Collaboration (Instrumental). 3 hours. Fundamentals of instrumental collaboration; rehearsal techniques; score reading (transposition and clefs); orchestral reductions and thorough bass realization; instrumental repertoire; work with soloists. Prerequisite(s): consent of instructor.

MUAG 5271. Instrumental Repertoire Master Class. 3 hours. Intensive study and performance of sonata and other instrumental literature. Prerequisite(s): MUAG 5270 or consent of instructor. May be repeated for credit.

MUAG 5280. Service Playing Skills I. 2 hours. Intense study of basic hymn playing, keyboard harmony, transposition, figured bass, open score reading, sight-reading and beginning improvisation. Prerequisite(s): satisfactory score on Graduate Placement Exam or MUTH 5001, MUTH 5002 and MUTH 5003.

MUAG 5300. Apprenticeship in Organ Building. 4 hours. Apprenticeship experience with an approved organ builder. Apprentice to gain experience in several areas of organ building, including tuning, voicing, design, windchest construction, action regulation and general service work. Prerequisite(s): completion of 20 hours towards the Master of Music degree with a major in performance and a concentration in organ building. Pending approval of MM in Organ Building by the Texas Higher Education Coordinating Board.

MUAG 5360. Instrumental Pedagogy and Repertoire. 3 hours. Study and analysis of instrumental literature; correlation of literature and pedagogical materials; survey of schools of performance and instruction; brass, percussion, keyboard, strings and woodwinds. May be repeated for credit as topics vary.

MUAG 5390. Studies in Organ/Harpsichord Literature, Pedagogy, Construction and Design. 3 hours. For interests and talents of students; class and private conferences. Topics may include special problems in performance and literature, pedagogical materials and skills, correlations between literature and organ design, and organ and/or harpsichord maintenance. May be repeated for credit as topics vary.

MUAG 5450. Introduction to Music and Medicine. 3 hours. A general overview of the discipline of music medicine, including major contributions to the field, history, methodologies, practical performance, clinical and pedagogic applications. Prerequisite(s): admission to program.

MUAG 5560. Advanced Piano Pedagogy and Musicianship. 3 hours. Instructional techniques, materials, curriculum planning and philosophical basis for teaching piano and musicianship at the college and university levels with focus on group instruction. Prerequisite(s): MUAG 4260 and MUAG 4270, or equivalent. Field experience required.

MUAG 5570. Comparative Piano Pedagogy and Repertoire. 3 hours. Instructional techniques, repertoire, curriculum planning and philosophical basis for teaching piano performance at the high school and undergraduate collegiate levels. Prerequisite(s): MUAG 4260 and MUAG 4270, or equivalent. Field experience required.

MUAG 5600. Advanced Science and Pedagogy of Singing. 3 hours. Advanced literature on research in singing; laboratory instrumentation; practical studio procedures for building and equalizing the singing voice. Topics include vocal abuse and misuse, fitness for singers, and the psychology of singing and teaching of singing. Studio observations and practice in teaching. Prerequisite(s): MUAG 4300 or consent of college.

MUAG 5610. Comparative Pedagogy of Singing. 3 hours. Comparison of Western pedagogical models from the bel canto period (1685–1825) to the present and of current national styles. Formulation of teaching strategies harmonious with the common ideals of Western artistic voice culture. Prerequisite(s): MUAG 5600 or consent of college.

MUAG 5640. Operatic Acting. 1–3 hours. Analysis and preparation of roles, exercises in pantomime, improvisation, visualization and concentration.

MUAG 5650. Opera Stage Direction. 3 hours. Prerequisite(s): MUAG 5640 or MUEN 3040 (two terms/semesters), and consent of college.

MUAG 5660. Studies in Opera Repertoire. 3 hours. Extensive analysis and background study of representative operas from one of the following periods: beginnings through Mozart, 19th-century Italian and French opera, 19th-century German and Russian opera, and 20th-century opera. Guided research on individual projects. May be repeated for credit as topics vary.

MUAG 5800. Advanced Choral Conducting. 3 hours. Class is organized as an a cappella choir for performance practice; manipulating the group and the music. Prerequisite(s): MUAG 3820 or equivalent.

MUAG 5810. Choral Literature. 3 hours. Topics in choral music, organized by period and/or genre. Score study, listening, performance practice, technical demands and rehearsal requirements. Course content varies each term/semester. May be repeated for credit.

MUAG 5850. Advanced Instrumental Conducting. 3 hours. Exercises to develop coordination of mind and hands; techniques of noted conductors; musical terms; score reading and actual conducting. Prerequisite(s): MUAG 3800-3870 and consent of instructor. Audition required.

MUAG 5860. Wind Instrument Ensemble Literature. 3 hours. A comprehensive survey and study of the important wind repertoire for large and smaller instrumental ensembles. Topics include programming, analysis, interpretation, rehearsal problems and performance style.

MUAG 5890. Topics in Music Performance and Pedagogy. 1–3 hours. Selected topics in music performance and pedagogy that are not met by the regular offerings. Short courses and workshops on specific topics organized on a limited-offering basis. May be repeated for credit.

MUAG 5900-MUAG 5910. Special Problems. 1–3 hours each.

MUAG 6260. Piano Literature. 3 hours. Baroque and classical periods; recordings and student performances.

MUAG 6270. Piano Literature. 3 hours. Romantic period to present; recordings and student performances.

MUAG 6280. Vocal Literature. 3 hours. Solo literature from 1509 to 1750; stylistic analysis and historical significance.

MUAG 6290. Vocal Literature. 3 hours. Solo literature from 1750 to present; stylistic analysis and historical significance.

MUAG 6360. Instrumental Literature. 3 hours. Solo works for the student’s major instrument.

MUAG 6370. Instrumental Literature. 3 hours. Chamber and orchestral works for the student’s major instrument.

MUAG 6380. Organ Literature. 3 hours. To 1750.

MUAG 6390. Organ Literature. 3 hours. From 1750 to present.

MUAG 6450. Advanced Music and Medicine Seminar. 3 hours. (2;1) Seminar involving conducting and completing a term/semester-long project utilizing the research, clinical, and/or educational resources for the Texas Center for Music and Medicine. Prerequisite(s): MUAG 5450.

MUAG 6640. Opera Production. 3 hours. Choosing repertoire, securing materials, translation, budget planning and promotion. Prerequisite(s): MUAG 5650 and consent of college.
MUAG 6850. Advanced Score Reading and Interpretation (Band and/or Orchestra). 3 hours. Analysis of works of various styles and periods to determine interpretive dimensions, rehearsal and baton techniques. Conducting experience provided with performing organizations. Prerequisite(s): examination and consent of college. Course content varies each term/semester.

MUAG 6900-MUAG 6910. Special Problems. 1–3 hours each.

**Applied Private Lessons, Music, MUAM; MUAC; MUAS**

Curriculum requirements in Music Applied Private Lessons for majors (MUAM) are 3–4 credit hours per term/semester; for concentrations (MUAC), 2 credit hours per term/semester; for secondaries and electives (MUAS), 1 credit hour per term/semester. Exceptions to these requirements must have the consent of the dean of the College of Music.

5501-5533. Master's-Level Applied Music, Private Lessons. Variable credit: for majors (MUAM), 1–5 semester hours; for concentrations (MUAC), 1–3 semester hours; for secondaries and electives (MUAS), 1–2 semester hours. Fee required.

5501. Piano.
5502. Organ.
5503. Voice.
5504. Violin.
5505. Viola.
5506. Cello.
5507. Double Bass.
5508. Flute.
5509. Oboe.
5511. Clarinet.
5512. Saxophone.
5513. Bassoon.
5514. French Horn.
5515. Trumpet.
5516. Trombone.
5517. Euphonium.
5518. Tuba.
5519. Harp.
5520. Vocal Coaching. (MUAS only)
5521. Guitar.
5522. Harpsichord.
5523. Conducting. (MUAM only)

5600-5633. Doctoral-Level Applied Music, Private Lessons. Variable credit: for majors (MUAM), 1–5 semester hours; for concentrations (MUAC), 1–3 semester hours; for secondaries and electives (MUAS), 1–2 semester hours.

5601. Piano.
5602. Organ.
5603. Voice.
5604. Violin.
5605. Viola.
5606. Cello.
5607. Double Bass.
5608. Flute.
5609. Oboe.
5611. Clarinet.
5612. Saxophone.
5613. Bassoon.
5614. French Horn.
5615. Trumpet.
5616. Trombone.
5617. Euphonium.
5618. Tuba.
5619. Harp.
5620. Vocal Coaching. (MUAS only)
5621. Guitar.
5622. Harpsichord.
5633. Conducting. (MUAM only)

### Chamber Music, MUCM

MUCM 5510. String Chamber Music. 1 hour. (0;2)
MUCM 5520. Woodwind Chamber Music. 1 hour. (0;2)
MUCM 5530. Brass Chamber Music. 1 hour. (0;2)
MUCM 5540. Percussion Chamber Music. 1 hour. (0;2)
MUCM 5550. Jazz Chamber Music. 1 hour. (0;2)

### Composition, Music, MUCP

MUCP 5080. Composition Seminar. 3 hours. Exploration of current compositional practices, including analysis of contemporary repertoire, discussion of the composer's role in contemporary society, and survey of resources available to composers. Creation of individual composition projects and class presentations. Prerequisite(s): acceptance into the graduate composition program as a major or concentration.

MUCP 5180. Secondary Composition. 2–3 hours. Development of contemporary compositional techniques and styles. Prerequisite(s): 6 hours of undergraduate composition or consent of division. For non-composition majors. May be repeated for credit.

MUCP 5185. Concentration Composition. 2–3 hours. Composition in larger forms for various media. For students with a related field or concentration in composition. May be repeated for credit. Prerequisite(s): 6 hours of undergraduate composition or equivalent; acceptance to the composition program as a related field of concentration.
MUCP 5190. Master's Composition. 2–3 hours. Composition in larger forms for various media. May be repeated for credit. Prerequisite(s): Bachelor's degree in composition or equivalent; MUCP 5080. Restricted to students who have been admitted to the MM in composition.

MUCP 5320. Orchestration. 3 hours. Historical survey of orchestral practices, with emphasis on contemporary approaches. Creation of original works or transcriptions for orchestra. Score study and rehearsal attendance required. Prerequisite(s): MUCP 4310 or equivalent; consent of division. Primarily for composition majors. (Same as MUCP 4320.)

MUCP 5460. Contemporary Music. 3 hours. Study of recent music emphasizing experimental compositional trends. Listening, score study and analysis. Prerequisite(s): consent of division. (Same as MUCP 4460.)

MUCP 5580. Contemporary Performance Practices. 3 hours. Study of 20th- and 21st-century performance practices, including innovative notations, extended instrumental techniques, and approaches to interpretation. Prerequisite(s): MUCP 5460, MUMH 5343, or equivalent.

MUCP 5590. Intermedia Performance Arts. 2 hours. (2,2) Introduction to intermedia performance art through class performance, repertoire analysis, historical context and readings of critical texts. Production of and performance in individual and group projects in the presentation of intermedia compositions, emphasizing computer music media and utilizing the resources of the Merrill Ellis Intermedia Theatre. Open to graduate students in music and other relevant fields in the arts, humanities and sciences. Must be taken concurrently with MUEN 5595.

MUCP 5670. Introduction to Electroacoustic Music. 3 hours. Theory, principles and practice of electroacoustic composition. Includes weekly studio time. Prerequisite(s): 6 hours of composition or consent of division. (Same as MUCP 4670.)

MUCP 5680. History and Technology of Electroacoustic Music. 3 hours. Study of synthesis and studio processing, both historically and in current practice. Course projects focus on electroacoustic music applications, practical exercises, and original compositions. (Meets with MUCP 4680 when taught as “History and Technology of Electroacoustic Music.”) Prerequisite(s): MUCP 5670 or equivalent.

MUCP 5690. Topics in Electroacoustic Music. 3 hours. Advanced studies in electroacoustic music focusing on compositional techniques, interactive systems, software tools, hardware design, performance practices, and analytical approaches. May be repeated for credit. Prerequisite(s): MUCP 5680 or equivalent.

MUCP 5900-MUCP 5910. Special Problems. 1–3 hours each.

MUCP 6190. Doctoral Composition. 2–3 hours. Composition project of substantial scope. Prerequisite(s): master's degree in composition or equivalent; MUCP 5080. May be repeated for credit. Restricted to students who have been admitted to the DMA program in composition.

MUCP 6195. Advanced Research in Composition. 3 hours. Individually directed research in composition, including analytical and historical perspectives. Prerequisite(s): 12 hours of MUCP 6190 and/or MUCP 6200; approved research topic proposal and consent of division. May be repeated for credit as topics vary.

MUCP 6200. Advanced Research in Computer Music. 3 hours. Individually directed computer music research project, including such topics as algorithmic composition, software design, advanced synthesis and interactive systems. Prerequisite(s): MUCP 5080; approved research topic proposal and consent of division. May be repeated for credit.

MUCP 6465. Topics in Contemporary Music. 3 hours. Specialized seminars on selected topics in contemporary music including the works of selected composers, counterpoint, analytical techniques, notation, pitch and temporal structures, timbre and texture, aesthetics, and psychoacoustics. Prerequisite(s): MUCP 5460 or equivalent; satisfactory scores on the Graduate Placement Examination or equivalent graduate courses.

MUCP 6900-MUCP 6910. Special Problems. 1–3 hours each.

Education, Music, MUED

MUED 5100. Music Supervision. 3 hours. Organization and duties; improving instruction; demonstration teaching; public department curricula. Supervisor's relation to community; ethics.

MUED 5120. Applied Research in Music Education. 3 hours. Theories, techniques and procedures for conducting and understanding research related to human musical behaviors. Open to students in fields other than music. Required for all master's degree students in music education.

MUED 5280. Admission Seminar. 3 hours. Survey of current trends and problems in music education. Evaluation of the student's qualifications, providing a basis for construction of a degree plan. Required for all master's degree students in music education.

MUED 5300. Instrumental Techniques: Band and Orchestra. 3 hours. Organization of public school bands, orchestras and instrumental programs. Purchase and care of instruments. Conducting; rehearsals and instrumental classes; program building; contests and festivals. May be repeated for credit as topics vary.

MUED 5500. History of Music Education in the United States. 3 hours. From 1620 to present; leading personalities, indigenous and black music, musical trends and concepts in music education.

MUED 5510. Philosophical Foundations and Principles of Music Teaching. 3 hours. Analysis of education objectives in music as related to practical concerns of the music teacher; justifications and rationales for music instruction in public schools.

MUED 5520. Psychology of Music. 3 hours. Physical factors that constitute musical sound and how these factors are perceived; methods and techniques for measuring musicality in individuals; psychology of learning as applied to music and musical behavior.

MUED 5821. Kodaly Concept Musicianship. 1 hour. Skill-based comprehensive study of musical basis of Kodaly-inspired music instruction; pentatony; modes; functional harmony; conducting; ensemble. May be repeated for credit when topics vary. Requires concurrent enrollment in MUED 5822 and MUED 5823.

MUED 5822. Kodaly Concept Musical Materials. 1 hour. Study of folk music sources, repertoire, styles; transcription and analysis; developing classification and retrieval systems for classroom use; art music in the elementary school. May be repeated for credit when topics vary. Requires concurrent enrollment in MUED 5821 and MUED 5823.
MUED 5823. Kodaly Concept Pedagogy and Practicum. 1 hour. Philosophy, principles, pedagogy of Kodaly-inspired approach to music education with emphasis on sequential skill development Grades K–1; Grades 2–3; Grades 4–6; advanced studies. May be repeated for credit as topics vary. Requires concurrent enrollment in MUED 5821 and MUED 5822.

MUED 5831. Orff-Schulwerk Ensemble and Pedagogy. 1 hour. Philosophy, principles, instructional strategies of Orff-Schulwerk approach to music education using unpitched and barred instruments in elemental style; pentatonic music-improvisation and orchestration; modal music-improvisation and orchestration; diatonic music-improvisation and orchestration. May be repeated for credit when topics vary. Requires concurrent enrollment in MUED 5832 and MUED 5833.

MUED 5832. Orff-Schulwerk Movement. 1 hour. Movement principles, concepts, vocabulary, instructional strategies, repertoire and improvisation; dance forms, accompaniment; movement notation and pedagogy. May be repeated for credit when topics vary. Requires concurrent enrollment in MUED 5831 and MUED 5833.

MUED 5833. Orff-Schulwerk Recorder. 1 hour. Study of soprano recorder; alto recorder; tenor, bass recorder. May be repeated for credit when topics vary. Requires concurrent enrollment in MUED 5831 and MUED 5832.

MUED 5840. Studies in Contemporary Music Education. 3 hours. Organized classes specifically designed to accommodate the needs of students and the demands of program development not met by regular offerings. Short courses and workshops on specific topics organized on a limited-offering basis, to be repeated only upon demand. May be repeated for credit when topics vary.

MUED 5880. Teaching Strategies in General Music at Pre-School, Elementary and Middle School Levels of Instruction. 3 hours. For each term/semester this organized class is offered, one topic from the list below is studied in depth; instructional methodologies, materials and activities in vocal music for the pre-school, elementary and middle school student; general music at the middle school level; instrument study for the general music student; curriculum development and instruction to meet the needs of the disabled, mentally challenged and gifted students. May be repeated for credit when topics vary.

MUED 5890. Project Practicum. 3 hours. Guided project course to plan a specific, pragmatic project in the student's respective area of general music, band, orchestra or choir that covers: an introduction to the content covered in the project, an extensive review of the research literature on the content covered in the project, and lesson plans or some other real world application of the knowledge gained through the review of the research literature. Pass/no pass only.

MUED 5900-MUED 5910. Special Problems. 1–3 hours each.

MUED 6430. Principles of Music Learning. 3 hours. Principles of music learning with specific attention to the process of learning musical skills and concepts. Included are the application of such learning theories as behaviorism and developmentalism to music, and such specific musical learning theories as those of Gordon, Orff, Kodaly and Suzuki.

MUED 6440. Systematic Measurement of Music Behaviors. 3 hours. Measurement with specific applications to the field of music, including music achievement, attitude preference, aptitude, perception, interaction, and music teacher behavior and effectiveness. Principles of measure creation, administration and analysis. Prerequisite(s): MUED 5120 or consent of college. Required of all doctoral candidates in music education.

MUED 6470. Sociology of Music. 3 hours. The interrelationship of music and society in the United States. Current uses of music; musical professions; economic aspects of music; research in the sociology of music.

MUED 6480. Doctoral Seminar in Music Education. 1 hour. Current trends, concepts, programs and practices. Two terms/semesters required of all doctoral candidates in music education. Pass/no pass only.

MUED 6490. Comparative Music Education. 3 hours. Identification and comparison of music education systems, programs and practices in selected countries throughout the world; critical review of cross-cultural research related to the field.

MUED 6520. Analysis and Criticism of Research Studies. 3 hours. Critical investigation of selected research studies in music and music education for purposes of evaluating research techniques, studying research designs and establishing validity of conclusions. Prerequisite(s): MUED 5120 or MUMH 5010, and knowledge of elementary statistics. Required of all doctoral candidates in music education.

MUED 6580. College Teaching of Music Courses. 3 hours. Principles of organization and instruction for courses in music theory, music education, music literature and history, and applied music. Taught by specialists in each of the fields.

MUED 6590. Practicum, Field Problem or Internship. 3 hours. Supervised professional activities in music teaching, conducting, supervision and administration in public departments, junior colleges or senior colleges. Allows for experimentation in the classroom or rehearsal hall during on-the-job or in-service training periods.

MUED 6620. Music, the Arts and the Humanities. 3 hours. Elements and symbols in the creative aspects of the performing and visual arts; objectives and instructional procedures appropriate for courses in music appreciation, integrated arts and aesthetic education; the arts as a part of liberal arts education. Open to graduate students in all academic disciplines.

MUED 6900-MUED 6910. Special Problems. 1–3 hours each.

Ensembles, Music, MUEN

MUEN 5040. Graduate Opera Theater. 1 hour. (0;6) Techniques of preparing and performing major roles. Prerequisite(s): consent of college. May be repeated for credit.

MUEN 5530-MUEN 5540. Collegium Musicum. 1 hour each. (0;3) Performance of less well-known vocal and instrumental music from the period 1200–1800. Prerequisite(s): consent of college.

MUEN 5585. NOVA Ensemble. 1 hour. (0;3) Performance of contemporary chamber works for mixed ensembles. Prerequisite(s): consent of college; audition required.
MUEN 5595. Intermedia Performance Arts. 1 hour. (0;1) Performance component of MUCP 5590, to be taken concurrently.

MUEN 5602. Brass Ensembles. 1 hour. (0;3)

MUEN 5605. Chamber Wind Ensemble. 1 hour. (0;3)

MUEN 5611. Jazz Ensembles. 1 hour. (0;2)

MUEN 5616. Chamber Orchestra. 1 hour. (0;3)

MUEN 5617. Percussion Ensembles. 1 hour. (0;2)

MUEN 5621. String Ensembles. 1 hour. (0;2)

MUEN 5624. Vocal Ensembles. 1 hour. (0;3)

MUEN 5625. Wind Ensembles. 1 hour. (0;2)

MUEN 5630. Harp Ensemble. 1 hour. (0;3)

Ethnomusicology, Music, MUET

MUET 5030. Music Cultures of the World. 3 hours. (3;1) Selected survey of music cultures of the world. Examination of musical traditions from a perspective that emphasizes music as an integral part of society and culture.

MUET 5040. Ethnomusicology Studies Abroad. 3–6 hours. Study and experience music cultures in their traditional settings. Field school locations include Africa, India and China. On-site visits to celebrations, ceremonies and rituals are combined with instruction by traditional musicians and guest lectures by cultural bearers. Musical traditions are studied from a perspective that emphasizes participant-observation. Open to majors from all fields of study. No formal musical training required. May be repeated for credit as topics/locations vary. (Meets with MUET 3040.)

MUET 5050. Music of Africa. 3 hours. Study of musical experience in African life. How does music function in everyday life, in ritual and ceremony? When does music happen and for what reasons? What are the social and political horizons of musical events? How has musical experience changed in contemporary life? These questions are explored in relation to African music, ranging from the complex vocal polyphony of the Mbuti Pygmies of the Ituri Forest to the worldwide explosion of Afro Pop. Open to majors of all fields. No formal musical training is needed to successfully complete this course. (Meets with MUET 3050.)

MUET 5060. African-American Music. 3 hours. Exploration of the experiences of blacks in the Americas vis-à-vis music. In particular, critical examination of the long trajectory of “black music” in the United States, making reference first to its West African antecedents. Consideration of ways that the term “black music” is deployed politically and its appropriateness as a descriptive and analytical category. Exploring the permeability of the sacred and secular in African American cultural experience, we will interrogate the musical, philosophical, and behavioral links between a Saturday night crowd and a Sunday morning people.

MUET 5070. Studies in Asian Music. 3 hours. Historical developments and current issues in Asian music. Select music cultures are studied from an ethnomusicological perspective. May be repeated for credit as topics vary.

MUET 5080. Studies in Latin American Music. 3 hours. Study of the traditional and popular music of Latin America in its cultural context using theoretical approaches of ethnomusicology and related disciplines. Countries and topics may vary. May be repeated as topics vary.

MUET 5090. Music of India. 3 hours. (3;1) Development of Indian music from Vedic times to the present day. Overview of North Indian classical music, a detailed study of South Indian classical music systems, and a selected survey of folk music from different regions of India.

MUET 5210. Seminar in Ethnomusicology. 3 hours. Selected topics in ethnomusicology: current theoretical and practical issues in the discipline. May be repeated for credit as topics vary.

MUET 5220. Ethnomusicology Field and Research Methods. 3 hours. Exploration of the relationship between shifting theoretical research paradigms and how they have affected field methodology. Close readings of representative ethnographies, several short field assignments and reports, and a field research project, resulting in a final paper.

MUET 5230. Ethnomusicology Transcription and Analysis. 3 hours. History of musical transcription in ethnomusicology; theoretical approaches to sound recordings and their analysis; practical instruction in transcription, including technological applications.

MUET 5617. African Music and Movement. 3 hours. Study of selected African drum music and development of related traditional movement skills through studio performance. Movement will be compared and contrasted with various African dance styles, while exploring their cultural basis, recreational and social uses, and artistic and educational values. May be repeated for credit.

MUET 5900. Ethnomusicology Special Problems. 3 hours. Special problems in ethnomusicology.

General Courses, Music, MUGC

MUGC 5555. Introduction to Music Entrepreneurship. 3 hours. (2;1) Workshop in the creation, management, and promotion of nonprofit and for-profit musical enterprises. Interdisciplinary studies include introductions to the professional music world, techniques of business management, and use of media for promotion. Practical group projects provide experience building real business plans and marketing strategies.

MUGC 5890. Studies in Music. 1–3 hours. Organized classes specifically designed to accommodate the needs of students and the demand of program development that are not met by the regular offerings. Short courses and workshops on specific topics organized on a limited offering basis. May be repeated for credit.

MUGC 5900-MUGC 5910. Special Problems. 1–3 hours each. For graduate students of unusual ability in music who may elect to study material not formally listed for instruction.

MUGC 5930. Research Problem in Lieu of Thesis. 3 hours. Prerequisite(s): MUMH 5010.

MUGC 5941. Graduate Artist Certificate Recital. 3 hours. (0;1) Registration only by consent of major professor. Recital requirement or those seeking the Graduate Artist Certificate in Music Performance. Prerequisite(s): Consent of major professor.

MUGC 5942. Graduate Artist Certificate Recital. 3 hours. (0;1) Registration only by consent of major professor. Recital requirement for those seeking the Graduate Artist Certificate in Music Performance. Prerequisite(s): Consent of major professor.
MUGC 5943. Graduate Artist Certificate Recital. 3 hours. (0;1) Registration only by consent of major professor. Recital requirement for those seeking the Graduate Artist Certificate in Music Performance. Prerequisite(s): Consent of major professor.

MUGC 5944. Graduate Artist Certificate Recital. 3 hours. (0;1) Registration only by consent of major professor. Recital requirement for those seeking the Graduate Artist Certificate in Music Performance. Prerequisite(s): Consent of major professor.

MUGC 5950. Master's Thesis. 3 or 6 hours. To be scheduled only with consent of college. 6 hours credit required. No credit assigned until thesis has been completed and filed with the graduate dean. Continuous enrollment required once work on thesis has begun. May be repeated for credit.

MUGC 6900-MUGC 6910. Special Problems. 1–3 hours each. For doctoral students of unusual ability in music who may elect to study material not formally listed for instruction.

MUGC 6941. Graduate Artist Certificate Recital. 3 hours. (0;1) Registration only by consent of major professor. Recital requirement for those seeking the Graduate Artist Certificate in Music Performance. Prerequisite(s): Consent of major professor.

Jazz Studies, Music, MUJS

MUJS 5430. Graduate Review of Jazz History. 3 hours. Study of the standard narrative of jazz history and jazz repertoire. (Meets with MUJS 4470.)

MUJS 5440. Introduction to Research in Jazz Studies. 3 hours. Bibliography, discography, interviewing; sociocultural aspects of research on jazz; scholarly writing; connections between jazz studies and musicology, ethnomusicology, and related disciplines. Prerequisite(s): MUJS 4470 or consent of college.

MUJS 5450. Jazz Historiography. 3 hours. Critical study of historical writing on jazz; special topics in jazz history; pedagogy of jazz history. Prerequisite(s): MUJS 5430 or consent of college.

MUJS 5470. Conducting College Jazz Ensembles. 3 hours. Score study and rehearsal preparation; methods of conducting jazz ensembles at all levels; supervised conducting.

MUJS 5480. Pedagogy of Jazz. 3 hours. Techniques, systems and materials. Prerequisite(s): MUJS 3360 and MUJS 3370, or consent of college.

MUJS 5490. Advanced Jazz Improvisation. 3 hours. Advanced techniques and practices of jazz improvisation. Prerequisite(s): MUJS 3370 with grade of A or B, or equivalent.

MUJS 5531. Jazz Piano. 2 hours. Applied study in jazz idiom; jazz improvisation. Prerequisite(s): consent of division.

MUJS 5532. Jazz Saxophone. 2 hours. Applied study in jazz idiom; jazz improvisation. Prerequisite(s): consent of division.

MUJS 5533. Jazz Voice. 2 hours. Applied study in jazz idiom; jazz improvisation. Prerequisite(s): consent of division.

MUJS 5534. Jazz Composition. 2 hours. Applied study of jazz composition and arranging for small and large ensembles. Prerequisite(s): consent of division.

MUJS 5535. Jazz Recital. 2 hours. For jazz studies MM students in performance track: public performance; in composition/arranging track: public performance of compositions and arrangements; in pedagogy track: public presentation of a pedagogy-related project. Prerequisite(s): consent of division.

MUJS 5536. Jazz Trumpet. 2 hours. Applied study in jazz idiom; jazz improvisation. Prerequisite(s): consent of division.

MUJS 5537. Jazz Trombone. 2 hours. Applied study in jazz idiom; jazz improvisation. Prerequisite(s): consent of division.

MUJS 5538. Jazz Double Bass. 2 hours. Applied study in jazz idiom; jazz improvisation. Prerequisite(s): consent of division.

MUJS 5539. Jazz Drumset. 2 hours. Applied study in jazz idiom; jazz improvisation. Prerequisite(s): consent of division.

MUJS 5540. Radio TV Music. 3 hours. (4;2) Composition and production of music for broadcast and digital media. Prerequisite(s): MUJS 3610 or consent of division.
MUJS 5760. Jazz Arranging. 3 hours. Individual instruction. An advanced practical study of arranging, focusing on music from jazz and other contemporary jazz-related styles. Prerequisite(s): MUJS 4620 or equivalent. May be repeated for credit as topics vary.

MUJS 5780. Jazz Styles and Analysis. 3 hours. The stylistic elements of the various eras of jazz history; theoretical analysis of significant musical qualities of influential musicians of the different periods of jazz.

MUJS 5900-MUJS 5910. Special Problems. 1–3 hours each.

Music History and Literature, and Musicology, MUMH

MUMH 5010. Introduction to Research in Music. 3 hours. Introduction to research techniques and application.

MUMH 5020. Introduction to Musicology. 3 hours. Critical assessment of current issues, methodologies and themes in musicological research. Prerequisite(s): MUMH 5010 or consent of college.

MUMH 5110. History of Opera. 3 hours. In-depth examination, at the graduate level, of selected topics in the history of opera.

MUMH 5120. History of the Symphony. 3 hours. In-depth examination, at the graduate level, of the history of the symphony. Specific topics vary by term/semester.

MUMH 5150. Music Criticism and the Aesthetics of Music. 3 hours. Nature of music; relation to architecture, painting, literature and sculpture; design, craftsmanship and criteria in music composition.

MUMH 5331. Western Music History, 750–1400. 3 hours. Current historical, analytical and methodological issues regarding music, 750–1400. Combination of lectures, source study and writing.

MUMH 5332. Western Music History, 1400–1600. 3 hours. Current historical, analytical and methodological issues regarding music, 1400–1600. Combination of lectures, source study, and writing.

MUMH 5333. Western Music History, 1600–1700. 3 hours. Current historical, analytical and methodological issues regarding music, 1600–1700. Combination of lectures, source study, and writing.

MUMH 5341. Western Music History, 1700–1800. 3 hours. Current historical, analytical and methodological issues regarding music, 1700–1800. Combination of lectures, source study, and writing.

MUMH 5342. Western Music History, 1800–1900. 3 hours. Current historical, analytical and methodological issues regarding music, 1800–1900. Combination of lectures, source study, and writing.

MUMH 5343. Western Music History, 1900 to the Present. 3 hours. Current historical, analytical and methodological issues regarding music, 1900 to the present. Combination of lectures, source study and writing.

MUMH 5430. Music in Latin America. 3 hours. Examination of selected topics in the history of music by Latin American composers. Topics vary by term/semester.

MUMH 5440. Music in the United States. 3 hours. Examination of selected topics in the history of music in the United States. Topics vary by term/semester.

MUMH 5550. History of Musical Instruments. 3 hours. Musical instruments in Western culture from the earliest times; their evolution, influence and use in the central European tradition. Taxonomy, acoustics, design and construction, musical and organological literature.

MUMH 5610. Improvisation and Ornamentation 1500–1800. 3 hours. Improvisation and ornamentation practices of the Renaissance, baroque and classical periods. Students write and perform ornamentations weekly. Prerequisite(s): admittance to MM in musicology, DMA or MM related fields in early music or consent of instructor.

MUMH 5711. Seminar in Musicology. 3 hours. Practical application of musicological techniques to selected research areas; a proseminar. Prerequisite(s): MUMH 5010.

MUMH 5900-MUMH 5910. Special Problems. 1–3 hours each.

MUMH 6000. Notation of Polyphonic Music, 1200–1500. 3 hours. Survey of notational practices of the Middle Ages and early Renaissance. Students undertake weekly transcriptions into modern notation, primary and secondary readings, and writing. Prerequisite(s): transcript and entrance exam deficiencies satisfied; MUMH 5010 or consent of instructor.

MUMH 6020. Medieval Music. 3 hours. Seminar on selected topics in medieval music. Prerequisite(s): transcript and entrance exam deficiencies satisfied; MUMH 5010 or consent of instructor.

MUMH 6030. Renaissance Music. 3 hours. Seminar on selected topics in Renaissance music. Prerequisite(s): transcript and entrance exam deficiencies satisfied; MUMH 5010 or consent of instructor.

MUMH 6080. Chamber Music. 3 hours. Historical, analytical and aesthetic studies of selected chamber music. Prerequisite(s): transcript and entrance exam deficiencies satisfied; MUMH 5010 or consent of instructor.

MUMH 6160. Major Composers. 3 hours. Historical, analytical and aesthetic studies of a selected major composer. Prerequisite(s): transcript and entrance exam deficiencies satisfied; MUMH 5010 or consent of instructor.

MUMH 6520. Performance Practice: Medieval/Renaissance. 3 hours. Study of medieval and Renaissance performance practices. Prerequisite(s): MUMH 5010 or equivalent.

MUMH 6530. Performance Practice: Baroque. 3 hours. Study of baroque performance practices. Prerequisite(s): MUMH 5010 or equivalent.

MUMH 6540. Performance Practice: Classic/Romantic. 3 hours. Study of classical and romantic performance practices. Prerequisite(s): MUMH 5010 or equivalent.

MUMH 6610. Direction of University Early Music Ensembles. 3 hours. Philosophies, techniques, instruments and maintenance, sources, and programming for directing early music ensembles at the collegiate level. Prerequisite(s): admittance to PhD in musicology or permission of instructor.

MUMH 6740. Baroque Music. 3 hours. Seminar on selected topics in baroque music. Prerequisite(s): transcript and entrance exam deficiencies satisfied; MUMH 5010 or consent of instructor.

MUMH 6750. Classical Music. 3 hours. Seminar on selected topics in classical music. Prerequisite(s): transcript and entrance exam deficiencies satisfied; MUMH 5010 or consent of instructor.

MUMH 6760. Music of the Romantic Era. 3 hours. Seminar on selected topics in 19th-century music. Prerequisite(s): transcript and entrance exam deficiencies satisfied; MUMH 5010 or consent of instructor.
MUSM 5286. Music in the Church: The Larger Volunteer Choir. 3 hours. A chronological survey of church music; music in the Hebrew Testament and its influence on music of the early Christian Church; Renaissance and Reformation, development of the oratorio influence of Henrich Schuetz and J. S. Bach, the English Restoration, music in the English Chapel Royal, development of the English hymn, music in the courts of Europe, Romantic music, Oxford Movement influence on music, 19th century revival of music. This seminar is designed for anyone planning a career in church music: choral director/minister of music; organist; choirmaster/organist. Aural and printed musical examples, repertoire lists. How to make practical use of music in the church with extensive repertoire lists aimed at finding quality music from ever period, easy to moderate difficulty, of practical use with the volunteer church choir.

MUSM 5287. Church Music Intermediate Practicum. 3 hours. The mechanics of administering a comprehensive church music program including outlines of structure of varied model programs, working with volunteers, church committees, the pastor(s), the interview, resources for music and equipment, preparing a budget, sample contracts, copyright laws, professional memberships and denominational variants. Extensive study of psalm singing, looking at styles of Gregorian Chant to Gelineau-type psalms; how to interpret Gregorian Psalm notation, understanding pointing, ways to teach them and ways to perform them; the denominational hymnal as a resource; for organists, how to accompany the different types of psalms; introduction to hand bells and repertoire for hand bells; diplomacy and church politics; choral repertoire lists; working with adult, children and youth choirs.

MUSM 5288. Church Music Advanced Practicum. 3 hours. Conducting from the organ console; creative hymn playing; playing orchestral reductions; creative registration; anthem accompaniment including the English Cathedral repertoire; planning the choral rehearsal; extensive survey of practical organ repertoire for use in worship; modulations; professional memberships, resources for music, transposition; descants and free accompaniments, pipe and electronic organs; introduction to music writing software; sample contracts, copyright laws; repertoire for organ and instruments; appropriate wedding and funeral repertoire. Introduction to goals and missions for supporting professional organizations such as the American Guild of Organists; Organ Historical Society; The Organ Club of Great Britain. Matters of diplomacy and church politics. Prerequisite(s): MUSM 5287 recommended, not required.

Music Laboratories, MULB

MULB 5171. Large Ensemble: Choir. 1 hour. (0;4)
MULB 5172. Large Ensemble: Orchestra. 1 hour. (0;4)
MULB 5173. Large Ensemble: Band. 1 hour. (0;4)
MULB 5174. Large Ensemble: Jazz Lab Band. 1 hour. (0;4)
MULB 5175. Large Ensemble: Accompanying. 1 hour. (0;4)

Sacred Music, MUSM

MUSM 5285. Music in Church: Gregorian Chant, Protestant Reformation, and John Keble. 3 hours. A chronological survey of church music; music in the Hebrew Testament and its influence on music of the early Christian Church; Renaissance and Reformation, development of the oratorio influence of Henrich Schuetz and J. S. Bach, the English Restoration, music in the English Chapel Royal, development of the English hymn, music in the courts of Europe, Romantic music, Oxford Movement influence on music, 19th century revival of music. This seminar is designed for anyone planning a career in church music: choral director/minister of music; organist; choirmaster/organist. Aural and printed musical examples, repertoire lists. How to make practical use of music in the church with extensive repertoire lists aimed at finding quality music from ever period, easy to moderate difficulty, of practical use with the volunteer church choir.

MUSM 5286. Music in the Church: The Larger Volunteer Choir. Hymnody in the 20th and 21st Centuries. 3 hours. A survey of church music, chronologically exploring the influence of Eastern Music, African music, North American church music and music in 20th century America, including aural and printed examples with repertoire lists. How to make practical choices in choral music with repertoire lists aimed at finding quality music, easy-to-moderate difficulty, appropriate for the volunteer church choir, mostly SATB, some SAB, 2-part and unison anthems. Explores how to assess the appropriateness of music for volunteer singers: liturgically, musically, denominationally. The mechanics of an efficient choral rehearsal; planning, using the liturgical year and a lectionary; preparing a budget; survey of resources for music and equipment; introduction to music writing software.

MUSM 5287. Church Music Intermediate Practicum. 3 hours. The mechanics of administering a comprehensive church music program including outlines of structure of varied model programs, working with volunteers, church committees, the pastor(s), the interview, resources for music and equipment, preparing a budget, sample contracts, copyright laws, professional memberships and denominational variants. Extensive study of psalm singing, looking at styles of Gregorian Chant to Gelineau-type psalms; how to interpret Gregorian Psalm notation, understanding pointing, ways to teach them and ways to perform them; the denominational hymnal as a resource; for organists, how to accompany the different types of psalms; introduction to hand bells and repertoire for hand bells; diplomacy and church politics; choral repertoire lists; working with adult, children and youth choirs.

MUSM 5288. Church Music Advanced Practicum. 3 hours. Conducting from the organ console; creative hymn playing; playing orchestral reductions; creative registration; anthem accompaniment including the English Cathedral repertoire; planning the choral rehearsal; extensive survey of practical organ repertoire for use in worship; modulations; professional memberships, resources for music, transposition; descants and free accompaniments, pipe and electronic organs; introduction to music writing software; sample contracts, copyright laws; repertoire for organ and instruments; appropriate wedding and funeral repertoire. Introduction to goals and missions for supporting professional organizations such as the American Guild of Organists; Organ Historical Society; The Organ Club of Great Britain. Matters of diplomacy and church politics. Prerequisite(s): MUSM 5287 recommended, not required.
MUTH 5400. Invertible Counterpoint and Fugue. 3 hours. Advanced techniques in contrapuntal writing in 18th-century style. Prerequisite(s): MUTH 5420; satisfactory score on the Graduate Placement Examination, or MUTH 5001, MUTH 5002 and MUTH 5003.

MUTH 5470. Advanced Schenkerian Analysis. 3 hours. Advanced analysis of tonal music according to the theory of structural levels and methods of graphic analysis developed by Heinrich Schenker. Prerequisite(s): MUTH 4370; satisfactory score on the Graduate Placement Examination, or MUTH 5001, MUTH 5002 and MUTH 5003.

MUTH 5720. Computer-Assisted Instruction in Music. 3 hours. Survey of computer-assisted instruction (CAI) systems for music. Development of programming and evaluative skills necessary to develop complete CAI systems for music instruction. Prerequisite(s): CSCE 5013, CECS 5110 or CSCE 5933; satisfactory score on the Graduate Placement Examination, or MUTH 5001, MUTH 5002 and MUTH 5003.

MUTH 5900-MUTH 5910. Special Problems. 1–3 hours each.

MUTH 6500. Form and Style Analysis I. 3 hours. Identification of structural principles and compositional idioms characteristic of historical eras and representative composers from Ars Antiqua through the early baroque. Prerequisite(s): satisfactory score on the Graduate Placement Examination, or MUTH 5001, MUTH 5002 and MUTH 5003.

MUTH 6510. Form and Style Analysis II. 3 hours. Identification of structural principles and compositional idioms characteristic of historical eras and representative composers from the late baroque through the 20th century. Prerequisite(s); satisfactory score on the Graduate Placement Examination, or MUTH 5001, MUTH 5002 and MUTH 5003.

MUTH 6660. History of Music Theory. 3 hours. Theoretical systems and treatises from antiquity to the late 15th century and analysis of related compositions. Prerequisite(s): MUMH 5010 or MUMH 5020 (concurrent enrollment is acceptable), or equivalent; satisfactory score on the Graduate Placement Examination, or MUTH 5001, MUTH 5002 and MUTH 5003.

MUTH 6670. History of Music Theory. 3 hours. Theoretical systems and treatises from the 16th to early 18th century and analysis of related compositions. Prerequisite(s): MUMH 5010 or MUMH 5020 (concurrent enrollment is acceptable), or equivalent; satisfactory score on the Graduate Placement Examination, or MUTH 5001, MUTH 5002 and MUTH 5003.

MUTH 6680. Proseminar in Music Theory. 3 hours. Investigation and research; subject matter variable to meet needs of students. Prerequisite(s): satisfactory score on the Graduate Placement Examination, or MUTH 5001, MUTH 5002 and MUTH 5003. May be repeated for credit as topics vary.

MUTH 6700. Analytical Systems I (1700–1900). 3 hours. Examination of analytical systems from the middle works of Rameau to the harmonic theories of Riemann, Schenker and Schoenberg. Prerequisite(s): MUTH 5360, and MUMH 5010 or MUMH 5020 (concurrent enrollment is acceptable), or equivalent.

MUTH 6710. Analytical Systems II (Post 1900). 3 hours. Examination of analytical systems in the 20th century. Prerequisite(s): MUTH 5370, and MUMH 5010 or MUMH 5020 (concurrent enrollment is acceptable), or equivalent.

Music/Education
see Music

Music/Laboratories
see Music

Musicology, Music History and Literature
see Music

Nuclear Engineering Technology
see Undergraduate Catalog

Philosophy and Religion Studies

Philosophy, PHIL

PHIL 5010. Seminar in the Philosophy of Ecology. 3 hours. Traces the evolution of ecology from its roots in 19th-century natural history to the present with an emphasis on the prominent paradigms and conceptual trends, such as organicism, community ecology, ecosystem ecology, disturbance and flux. Also explores the sociocultural contexts in which ecology emerged and now exists, including the so-called second scientific revolution and the two-culture split.

PHIL 5050. Professional Development Seminar. 3 hours. Examination of philosophies of education and pedagogical techniques and problems. Includes instruction, advising and preparation for professional development for academic careers, troubleshooting in the classroom, course preparation, university policies on teaching and student responsibilities, and teaching demonstrations.

PHIL 5100. Ancient Philosophy. 3 hours. A concentrated examination of some major problem areas in ancient Western philosophy. For example, concepts of nature, concepts of the character and function of knowledge, concepts of the nature and extent of value. Major thinkers normally covered include the historiographical study of pre-Socratic figures, Plato and Aristotle.

PHIL 5200. Modern Philosophy. 3 hours. A concentrated examination of some major problem areas in modern Western philosophy. For example, concepts of nature, concepts of the character and function of knowledge, concepts of the nature and extent of value. Major thinkers covered may include Descartes, Spinoza, Locke, Hume and Kant.