

**5750. Electronic Merchandising.** 3 hours. Analysis and application of electronic information exchange technology related to textile, apparel, home furnishings and other fashion-oriented products. Emphasis on product development, manufacturing/production, distribution, merchandising, e-commerce and sales.

**5790. Field Experiences in Various Areas of Concentration.** 3 hours. Arranged.

**5800. Seminar in Various Areas of Concentration.** 3 hours. May be repeated for credit as topics vary.

**5820. Facilities Planning, Equipment Layout and Design.** 3 hours. (2;2) Principles of hospitality property management and design with analysis of efficient work spaces for hospitality operations emphasizing space utilization and work flow, ADA adherence, environmental concerns and regulations, and the creation of a safe and secure work environment.

**5830. Legal and Regulatory Aspects of Merchandising and Hospitality Management.** 3 hours. Introduction to the laws and regulations which influence business and management decisions in merchandising and the hospitality industry. Provides a practical knowledge of the law and operation of the legal system. Focuses on the management techniques for minimizing risks associated with legal liability.

**5850. Brand Development.** 3 hours. Students understand the role of brand, the concept of brand equity, and importance of creating strong brands. Application of brand knowledge to brand portfolio development. Students integrate theoretical frameworks through case study analyses. Prerequisite(s): SMHM 2400 or SMHM 2490 or consent of instructor. (Meets with SMHM 4850.)

**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.

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

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

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

### Applied General Courses, Music, MUAG

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

**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.

**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.

**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.

**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.

**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.

**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.

**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, 5002 and 5003.

**5290. History of Organ Style and Design.** 2 hours. A survey of national styles of organ building in Germany, France, Italy, Spain and England, 1550–1900. Emphasis on construction of action, windchests and pipes. Contemporary development of the organ in North America. Prerequisite(s): MUAG 4390, undergraduate organ literature.

**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.*

**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.

**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.

**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.

**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 4270, or equivalent. Field experience required.

**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 4270, or equivalent. Field experience required.

**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.

**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.

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

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

**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.

**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.

**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.

**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.

**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.

**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.

**5900–5910. Special Problems.** 1–3 hours each.

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

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

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

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

**6360. Instrumental Literature.** 3 hours. Solo works for the student's major instrument.

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

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

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

**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.

**6640. Opera Production.** 3 hours. Choosing repertory, securing materials, translation, budget planning and promotion. Prerequisite(s): MUAG 5650 and consent of college.

**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.

**6900-6910. 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.
- 5516. Trumpet.
- 5517. Trombone.
- 5518. Euphonium.
- 5519. Tuba.
- 5521. Percussion.

5522. Harp.

5523. Functional Piano. (MUAS only)

5524. Vocal Coaching. (MUAS only)

5526. Jazz Guitar. (MUAC only)

5527. Guitar.

5528. Harpsichord.

5529. Improvisation at the Organ. (MUAS only)

5531. Keyboard Continuo Playing. (MUAS only)

5532. Early Instruments. (MUAC and MUAS only)

5533. Conducting. (MUAM only)

**6501-6533. 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.

6501. Piano.

6502. Organ.

6503. Voice.

6504. Violin.

6505. Viola.

6506. Cello.

6507. Double Bass.

6508. Flute.

6509. Oboe.

6511. Clarinet.

6512. Saxophone.

6513. Bassoon.

6514. French Horn.

6516. Trumpet.

6517. Trombone.

6518. Euphonium.

6519. Tuba.

6521. Percussion.

6522. Harp.

6524. Vocal Coaching. (MUAS only)

6527. Guitar.

6528. Harpsichord.

6533. Conducting. (MUAM only)

### ***Chamber Music, MUCM***

5510. String Chamber Music. 1 hour. (0;2)

5520. Woodwind Chamber Music. 1 hour. (0;2)

5530. Brass Chamber Music. 1 hour. (0;2)

5540. Percussion Chamber Music. 1 hour. (0;2)

5550. Jazz Chamber Music. 1 hour. (0;2)

### ***Composition, Music, 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.

**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.

**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.

**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.

**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.)

**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.)

**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.

**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 Theater. Open to graduate students in music and other relevant fields in the arts, humanities and sciences. Must be taken concurrently with MUEN 5595.

**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.)

**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.

**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.

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

**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.

**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 6200; approved research topic proposal and consent of division. May be repeated for credit as topics vary.

**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.

**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.

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

### **Education, Music, MUED**

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

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

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

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

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

### **Ensembles, Music, 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.

**5530-5540. 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.

**5585. NOVA Ensemble.** 1 hour. (0;3) Performance of contemporary chamber works for mixed ensembles. Prerequisite(s): consent of college; audition required.

**5595. Intermedia Performance Arts.** 1 hour. (0;1) Performance component of MUCP 5590, to be taken concurrently.

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

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

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

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

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

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

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

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

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

### ***Ethnomusicology, Music, 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.

**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.)

**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.)

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

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

### ***General Courses, Music, 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.

**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.

**5900-5910. 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.

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

**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.

**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.

**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.

**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.

**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.

**6900-6910. 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.

**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.

**6942. 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.

**6943. 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.

**6944. 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.

**6950. Doctoral Dissertation.** 3, 6 or 9 hours. Registration only by consent of college. 12 hours credit required. No credit assigned until dissertation has been completed and filed with the graduate dean. Doctoral students must maintain continuous enrollment in this course subsequent to passing qualifying examination for admission to candidacy. May be repeated for credit.

**6951. Dissertation Recital.** 3 hours. Prerequisite(s): consent of major professor. Open only to DMA students in performance.

**6952. Dissertation Recital.** 3 hours. Prerequisite(s): MUGC 6951 and consent of major professor. Open only to DMA students in performance.

**6953. Dissertation Recital.** 3 hours. Registration only by consent of major professor. Prerequisite(s): MUGC 6951 and 6952; admission to candidacy; and consent of major professor. Open only to DMA students in performance.

**6954. Dissertation Recital.** 3 hours. Registration only by consent of major professor. Prerequisite(s): MUGC 6951, 6952 and 6953; admission to candidacy; and consent of major professor. Open only to DMA students in performance.

### ***Jazz Studies, Music, 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.

**5450. Studies in Jazz History.** 3 hours. A survey of jazz research materials and methodology, and presentation of special topics in jazz history. Prerequisite(s): MUJS 4470 or consent of college.

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

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

**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.

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

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

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

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

**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.

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

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

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

**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.

**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.

**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.

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

**Music History and Literature, and Musicology, MUMH**

**5010. Introduction to Research in Music.** 3 hours.

Introduction to research techniques and application.

**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.

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

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

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

**5900–5910. Special Problems.** 1–3 hours each.

**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.

**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.

**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.

**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.

**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.

**6220. Performance Practice: Medieval/Renaissance.** 3 hours. Study of medieval and Renaissance performance practices. Prerequisite(s): MUMH 5010 or equivalent.

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

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

**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.

**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.

**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.

**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.

**6770. Music of the Twentieth Century.** 3 hours. Seminar on selected topics in 20th-century music. Prerequisite(s): transcript and entrance exam deficiencies satisfied; MUMH 5010 or consent of instructor.

**6900–6910. Special Problems.** 1–3 hours each.

**Music Laboratories, MULB**

**5171. Large Ensemble: Choir.** 1 hour. (0;4)

**5172. Large Ensemble: Orchestra.** 1 hour. (0;4)

**5173. Large Ensemble: Band.** 1 hour. (0;4)

**5174. Large Ensemble: Jazz Lab Band.** 1 hour. (0;4)

**5175. Large Ensemble: Accompanying.** 1 hour. (0;4)

**Sacred Music, 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.

**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.

**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's and youth choirs.

**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.

**Theory, Music, MUTH**

**5001. Music Theory Practicum: Analysis.** 1 hour. (2;0) Theoretical principles of music from the 17th through early 20th centuries and their application through analysis.

**5002. Music Theory Practicum: Aural Skills.** 1 hour. (2;0) Theoretical principles of the 17th through early 20th centuries and their application through aural comprehension.

**5003. Music Theory Practicum: Keyboard.** 1 hour. (1;0) Theoretical principles of the 17th through early 20th centuries and their application through realization at the keyboard.

**5080. Pedagogy of Theory.** 3 hours. Concepts and methodologies relative to the teaching of music theory in the core curriculum; compilation of teaching materials. Prerequisite(s): satisfactory score on Graduate Placement Examination, or MUTH 5001, 5002 and 5003.

**5090. Problems in Pedagogy of Theory.** 3 hours. Observation, practice and supervised teaching of freshman/sophomore large-lecture, classroom and lab courses. Prerequisite(s): MUTH 5080. May be repeated for credit as teaching assignments vary.

**5110. Score Reading at the Keyboard.** 1 hour. Practical application of figured bass and score reading at the keyboard from two parts (C and Bass and Treble clefs) to the classic period symphony.

**5355. Analytical Techniques I (Ars Antiqua–1700).** 3 hours. Application of appropriate analytical approaches and methodologies in music written 900–1700. Prerequisite(s): satisfactory score on the Graduate Placement Examination, or MUTH 5001, 5002 and 5003.

**5360. Analytical Techniques II (1700–1900).** 3 hours. Application of appropriate analytical approaches and methodologies in music written 1700–1900. Prerequisite(s): satisfactory score on the Graduate Placement Examination, or MUTH 5001, 5002 and 5003.

**5370. Analytical Techniques III (Post 1900).** 3 hours. Application of appropriate analytical approaches and methodologies in music written after 1900. Prerequisite(s): satisfactory score on the Graduate Placement Examination, or MUTH 5001, 5002 and 5003. MUTH 5360 recommended. MUTH 4520 or consent of instructor.

**5400. Invertible Counterpoint and Fugue.** 3 hours. Advanced techniques in contrapuntal writing in 18th-century style. Prerequisite(s): MUTH 3420; satisfactory score on the Graduate Placement Examination, or MUTH 5001, 5002 and 5003.

**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, 5002 and 5003.

**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, 5002 and 5003.

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

**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, 5002 and 5003.

**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, 5002 and 5003.

**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 5020 (concurrent enrollment is acceptable), or equivalent; satisfactory score on the Graduate Placement Examination, or MUTH 5001, 5002 and 5003.

**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 5020 (concurrent enrollment is acceptable), or equivalent; satisfactory score on the Graduate Placement Examination, or MUTH 5001, 5002 and 5003.

**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, 5002 and 5003. May be repeated for credit as topics vary.

**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 5020 (concurrent enrollment is acceptable), or equivalent.

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

**6900–6910. Special Problems.** 1–3 hours each.

---

## 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

**5110. Seminar in the Theory of Knowledge.** 3 hours. Analysis of the essential problems involved in the theory of knowledge, including some of the classical answers to important epistemological problems.

**5250. Seminar in the Philosophy of Natural Science.** 3 hours. A study of the nature, limits and significances of physics, chemistry, biology and related sciences with emphasis on the similarities and contrasts between scientific and other modes of knowing.

**5260. Seminar in Philosophy of Social Science.** 3 hours. Questions on explanations, observable human purposes and science of valuation. Contrasting science, ideology and occultism. Darwinism as conceptual scheme. The “causal” status of symbols and verbal behavior. Debates about objectivity, *Verstehen*, phenomenology and behaviorism, referring to K. Popper, G. Nettle, L.A. White, B.F. Skinner, C. Geertz, T. Kuhn, P. Winch and M. Weber.

**5315. Topics in Ancient Philosophy.** 3 hours. An examination of some major problem areas in the history of 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 Plato and Aristotle.

**5335. Topics in Modern Philosophy.** 3 hours. An examination of some major problem areas in the history of 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 can include Descartes, Spinoza, Locke, Hume and Kant.

**5410. Seminar in Ethical Theory.** 3 hours. An examination of a variety of ethical theories and their application in applied situations.

**5450. Seminar in the Philosophy of Ecology.** 3 hours. Traces the evolution of ecology from its roots in 19th-century natural history through general ecology, restoration ecology, human ecology and mathematical ecology. Also explores the sociocultural contexts in which ecology emerged and now exists, including the so-called second scientific revolution and the two-culture split.

**5451. Environmental Ethics.** 3 hours. Examination of basic positions in the field of environmental ethics with emphasis on legal and moral rights for nature, animal liberation, and Western philosophical and religious traditions.

**5600. Philosophy of Religion.** 3 hours. Examination of arguments for and against the existence of a deity; meaning of concepts of religion, evil, good and worship; impact of religious beliefs and commitments on social and moral life.

**5670. Natural History and Philosophy of Rivers.** 6 hours. (3;5) Ecological, geological and philosophical history of arid watersheds of the western United States. Extended field trip required. Desert canyons are geologically unique and present wonderful opportunities to study interactions of geology, fauna, flora, environment, cultural development and environmental ethics. Prerequisite(s): consent of instructor. (Same as BIOL 5670.)

**5700. Seminar in Environmental Ethics.** 3 hours. An intensive analysis of new positions in environmental ethics with special emphasis on their theoretical value as a contribution to contemporary philosophy and their practical value with regard to environmental policy and decision making.