57-605 Theory & Analysis For Graduate Students
FALL: 6 UNITS
Theory & Analysis for Graduate Students is a six-unit course that does not count towards the requirements of a graduate degree.
This course explores a wide range of repertoire from the Common Practice Period, while refining harmonic and melodic analytical techniques. It serves as a foundation course for the upper level graduate music support theory and analysis courses.
Graduate students with insufficient scores on the Theory Competency Exam, as well as those who wish to solidify their theoretical skills before taking the more advanced theory courses, are advised to enroll in this class. A grade of at least a B in this course is needed to fulfill the requirements of the Theory Competency Exam.

57-606 Music History For Graduate Students
FALL: 6 UNITS
Music History for Graduate Students is a six-unit course that does not count towards the requirements of a graduate degree.
Undergraduate students may register for it with the graduate piano students and graduate instrumental students.
Graduate students with insufficient scores on the History Competency Exam, as well as those who wish to solidify their musicological skills before taking the more advanced history courses, are advised to enroll in this class. A grade of at least a B in this course is needed to fulfill the requirements of the History Competency Exam.

57-661 Piano Maintenance I
FALL: 6 UNITS
An introduction to the field of piano technology. A focused study and application of the tools, techniques and theories of piano maintenance. Private lessons, class time and group projects are used equally to develop the core knowledge of this field. Prospective students should possess good hearing.
This course will be continued in Piano Maintenance II. Successful completion of both courses will equip students with the basic resources to begin a career as a piano technician.

57-662 Piano Maintenance II
SPRING: 6 UNITS
Students will employ the skills and knowledge learned in Piano Maintenance I, applying them directly to an individually assigned piano. Use of private lessons, class time and group projects will continue. Developing mechanical problem solving and time management skills will be emphasized.
Successful completion of both Piano Maintenance I and II will equip students with the basic resources needed to begin a career as a piano technician.

57-700 to 722 Major Studio
FALL and SPRING: 9 UNITS
A one hour private lesson per week for all music majors.

57-729 Beginning Piano for Children
FALL and SPRING: 3 UNITS
This course is a year-long internship in the piano teaching of young children, combining class and private instruction: a study of the basic teaching/learning process as applied to piano teaching, covering comprehensive step-by-step presentation in reading, rhythm, ear training, sight reading, technique, and musicianship. Under supervision, students will teach the weekly group class and private lessons. Weekly conferences will be held for learning the presentation of materials for class teaching, analyzing pedagogical problems, and developing communication skills with both young pupils and their parents.

57-735 Chamber Music Literature I
FALL: 6 UNITS
Survey of instrumental chamber music literature from Haydn through Dvorak. This course can count as music support for graduate students (and undergraduate students). Undergraduate students may register with instructor permission if space is available after graduate students have registered.

57-736 Chamber Music Literature II
FALL: 6 UNITS
Survey of instrumental chamber music literature from Debussy/Ravel through contemporary works. These courses are based on the historical development of the different genres of chamber music with piano repertoire, listening, and study of representative works, class discussion, and live performances when possible. As a final project students will present to the class a lecture on previously selected repertoire. This course is mandatory for collaborative piano majors. It is primarily for graduate piano students and graduate instrumental students. Undergraduate pianists and instrumentalists may register for it with the approval of the instructor. This course can count as music support for graduate students (and undergraduate students). Undergraduate students may register with instructor permission if space is available after graduate students have registered.

57-737 Literature and Repertoire
FALL and SPRING: 3 UNITS
This course deals with literature and repertoire for orchestral instruments. There are multiple sections organized by instrument categories or specific instruments, as follows: Brass, Cello, Double Bass, Flute, Harp, Opera, Organ, Percussion, Trombone, Solo Trumpet, Tuba, Viola, Violin, and Woodwind. Piano Literature and Repertoire is listed as 57-881 through 57-884.
Brass: This class places a heavy emphasis on the power of music and the most effective ways to communicate this power. The students are challenged to express themselves from their heart and souls and not simply just play the notes or be solely technical players. They are challenged to be musical artists and discover what is between the notes. The repertoire closely follows the major repertoire for orchestral brass being performed by the Pittsburgh Symphony in the current season. The goal is to cover the repertoire before it is performed by the PSO, so then the student can go hear the music performed live. The concepts of sound production are also explored. The fundamental music elements of rhythm and intonation will be stressed.
Cello: This course provides in-depth analysis and performance practice of orchestral excerpts for audition purposes.
Double Bass: This course trains the student in orchestral playing with emphasis on both the works that are played by the CMU Philharmonic and works that are performed by the major symphony orchestras. Also, the students play before the other bassists so they will train for performing at auditions and in public. In addition, we look at other methods of training for playing the bass.
Flute: This course provides students with an array of activities related to flute playing that are not covered or are only partially covered by their regular Studio class including orchestral excerpt practice, solo repertoire, chamber music, an introduction to world music, book and video reviews, new repertoire reviews, and other special activities. The class offers a friendly environment in which students of different levels and backgrounds can share their musical experiences while gaining the widest possible exposure to styles, traditions, approaches, and tendencies that are part of present-day professional musical life.
French Horn: Review of literature for french horn majors.
Harp: Review of literature for harp majors.
Percussion: This course explores the performance practice of orchestral, chamber and solo pieces for percussion instruments. It also consists of master classes in the actual application of the pieces by the percussion professor.
Trombone: Review of literature for trombone majors.
Solo Trumpet: This course introduces the serious trumpet student, through performance and discussion, to the solo trumpet literature ranging from the early baroque through the most contemporary compositions. Great emphasis is placed upon the literature of both baroque and classical periods. The course also provides a forum for not only formal faculty input, but also for informal discussion by the class.
Tuba: Review of literature for tuba majors.
Viola: Review of literature for violin majors.
Violin: This course prepares violinists to take auditions for orchestras. Several commonly asked orchestral excerpts are chosen at the beginning of the semester for study in preparation. These excerpts are studied in detail in class, and each student is given the chance to play them by individually. The class also offers opportunities for sight-reading, learning how to be a principal player, and how to lead a sectional.

Woodwind: This course deals with orchestral woodwind playing with emphasis on different styles of playing required in today's symphony orchestras. Particular attention is paid to playing not only the soloists, but also the tutti sections of the standard orchestra repertoire. Style, intonation, and balance are areas of most importance. Class size is limited to a maximum of four of each of the woodwinds (including French horns).

57-738 Vocal Literature I
FALL: 6 units
This course is a survey of Italian and French song literature. It includes reading of songs, listening, and research projects.

57-739 Vocal Literature II
FALL: 6 units
This course is a survey of German and English/Contemporary song literature. It includes reading of songs, listening, and research projects.

57-740 Opera Literature
SPRING: 6 units
Course Description TBA.

57-741 Sonatas and Songs I
FALL: 3 units
This course will allow the collaborative pianist to work with singers and instrumentalists, coached by appropriate faculty. The course will culminate with a performance at the end of each semester.

57-742 Sonatas and Songs II
SPRING: 3 units
This course will allow the collaborative pianist to work with singers and instrumentalists, coached by appropriate faculty. The course will culminate with a performance at the end of each semester.

57-743 Sonatas and Songs III
FALL: 3 units
This course will allow the collaborative pianist to work with singers and instrumentalists, coached by appropriate faculty. The course will culminate with a performance at the end of each semester.

57-744 Sonatas and Songs IV
SPRING: 3 units
This course will allow the collaborative pianist to work with singers and instrumentalists, coached by appropriate faculty. The course will culminate with a performance at the end of each semester.

57-745 Chamber Music Coaching
SPRING: 3 units
The collaborative piano student will observe various coaches in vocal, instrumental, and chamber music venues. Pedagogical techniques will be reinforced in the studio.

57-746 Opera Coaching
FALL: 3 units
A course designed for pianists with focus on all styles of operatic literature. Emphasis placed on techniques of preparation and rehearsal of ensembles as well as solo repertoire. Effective means of producing orchestral textures at the piano are studied.

57-747 Harp Pedagogy
INTERMITTENT: 3 units
Course Description TBA.

57-748 Brass Pedagogy
INTERMITTENT: 3 units
In this course we introduce the "Art of Teaching": In this case, to teach, develop and encourage young brass players just starting an instrument or who are in their early stages of development. Concepts of basic brass pedagogy will involve the following topics:

- Music as Metaphor
- Teaching young students
- Listening
- Developing a Concept of Sound
- Posture
- Breathing
- Embouchure
- Articulation: Single Tonguing, Multiple Tonguing
- Mouthpiece playing
- The Warm-up
- Slurring
- Intonation
- The Upper Register
- Endurance
- Vibrato
- Dental Braces
- Orchestral Playing
- Performance Preparation
- Taking Auditions

Brass students will leave CMU with a basic understanding of the pedagogical needs and requirements of beginning and inexperienced students, so that they may begin private teaching studio upon graduation.

57-749 Beginning Piano for Children
FALL AND SPRING: 3 units
This course is a year-long internship in the piano teaching of young children, combining class and private instruction: a study of the basic teaching/learning process as applied to piano teaching, covering comprehensive step-by-step presentation in reading, rhythm, ear training, sight reading, technique, and musicianship. Under supervision, students will teach the weekly group class and private lessons. Weekly conferences will be held for learning the presentation of materials for class teaching, analyzing pedagogical problems, and developing communication skills with both young pupils and their parents.

Note: This number is to be used by students who have taken 57-729.

57-750 Dalcroze Piano Improvisation
INTERMITTENT: 3-6 units
These courses give the candidates in the Dalcroze Certification program the keyboard skills necessary for the teaching of Eurhythmics.

57-751 Dalcroze Piano Improvisation
INTERMITTENT: 3-6 units
Continues 57-750 Dalcroze Piano Improvisation.

57-752 Artists in Action
INTERMITTENT: 6 units
Responding to requests from the Pittsburgh community, Audience Engagement teams spearhead innovative performance projects that serve organizations such as the CMU Philharmonic, Pittsburgh Symphony, Hillman Cancer Center, Carnegie Hall, and the Pittsburgh Parks Conservancy, among others. A strong résumé builder, this course offers business connections and professional experience.

57-753 Art of Audience Engagement
INTERMITTENT: 3 units
In response to student requests for learning outreach skills, this course covers three main objectives of community engagement: education, building audiences, and uplifting humanity. The course offers three options into which students may self-select, based on interest: 1.) Lecture general interest, 2.) Audience Development internship (includes lecture), 3.) Teaching Artist Internship (includes lecture.)

57-756 Communication and Marketing
Intermittent: 6 units
What is your message? Who is your audience? How do you reach them? These are among the topics we’ll explore in this course. Group projects and case studies help us identify the key aspects of one of the most important aspects of any music career. Being a great musician won’t do you any good if no one knows you exist! By the end of the semester, students should be able to understand such concepts as branding, marketing, reach and advertising; identify audience segments and target messages to those segments; create compelling marketing materials, including bios, group and program descriptions, websites and flyers; work with teams to try out a variety of marketing strategies in real-world circumstances; learn to capitalize on social media and use it to effectively build and communicate to an audience; learn to write effective and powerful marketing copy (bios, sales pieces, etc.); examine competitors and market leaders to look for opportunities and best practices.
57-756 Stagecraft: Beyond the Performance Intermittent: 6 units
This course will teach skills that are essential to your success on the stage and beyond, including stage presence, attire and etiquette, public speaking, taking auditions, receptions, programming, and more. Music majors may take this course as individuals or together as, for example, a chamber music ensemble.

57-760 Schenker Analysis Intermittent: 9 units
This seminar provides an introduction to the theories and analytical methods of Heinrich Schenker. Assignments will include readings from primary and secondary sources, weekly analytic projects, student presentations, and a final paper which discusses an in-depth analysis of a short tonal piece from the common-practice repertoire. Students should have a solid background in tonal harmony and basic counterpoint. Pre-requisite: passing the grad theory placement test. This course can count as music support for graduate students.

57-761 Eurhythmics I Fall: 3 units
Dalcroze Eurhythmics is a unique approach to music learning based on the recognition that meaningful rhythmic movement experience associated with ear-training and improvisation reinforces understanding of music concepts, enhances musicianship and focuses awareness on the physical demands of artistic performance. All concepts are experienced in a musical context. Rhythm reading, notation, analysis and improvisation are integral to the course. Eurhythmics I covers basic binary and ternary metric units and rhythm patterns in relation to these metric units within simple and compound meters.

57-762 Eurhythmics II Spring: 3 units
Continues 57-761 Eurhythmics I. Eurhythmics II introduces combinations of binary and ternary metric units, mixed meters changing meters, and notation and performance of cross-rhythms.

57-763 Eurhythmics III Fall: 3 units
Continues 57-762 Eurhythmics II. Eurhythmics III focuses on rhythmic transformation, rhythm patterns based on small note values, irregular sub-divisions of metric units and more complex cross-rhythms.

57-764 Eurhythmics IV Spring: 3 units
Continues 57-763 Eurhythmics III. Eurhythmics IV focuses on changing metric units within a composition, polymeter, and asymmetric rhythmic augmentation/diminution based on Messiaen techniques.

57-771 Production: Performance Fall: 6 units
Course Description TBA.

57-772 Production: Performance Spring: 6 units
Course Description TBA.

57-779 Beginning Piano for Children Fall and Spring: 3 units
This course is a year-long internship in the piano teaching of young children, combining class and private instruction: a study of the basic teaching/learning process as applied to piano teaching, covering comprehensive step-by-step presentation in reading, rhythm, ear training, sight reading, technique, and musicianship. Under supervision, students will teach the weekly group class and private lessons. Weekly conferences will be held for learning the presentation of materials for class teaching, analyzing pedagogical problems, and developing communication skills with both young pupils and their parents. Note: This number is to be used by students who have taken 57-749.

57-780 Black American Music Seminar Spring: 6 units
Come and explore the rich musical heritage of Black America. This course will survey the music of Black America beginning with the African legacy and continuing through the music of the Twentieth Century. Class sessions will involve discussions, listening, viewing of films, and reports by students on topics of individual interest. Discussions will involve, historical, cultural and political perspective, as well as the music and composers themselves. Lecturing will be at a minimum. Innovative testing in quiz show format will be used. The class is open to graduate students. Undergraduate students may register with instructor permission if space is available after graduate students have registered. This course can count as music support for graduate students.

57-781 Collaborative Piano I Fall and Spring: 3-9 units
A hands-on series of courses that allow the student to accompany in a professional venue. Students will be assigned to a vocal and/or instrumental studio and will have the opportunity to coach repertoire with a professional accompanist. Assignments may include playing for instrumental juries.

57-782 Collaborative Piano II Fall and Spring: 3-9 units
Continues 57-781 Accompanying I.

57-783 Collaborative Piano III Fall and Spring: 3-9 units
Continues 57-782 Accompanying II.

57-784 Collaborative Piano IV Fall and Spring: 3-9 units
Continues 57-783 Accompanying III.

57-785 Collaborative Piano V Fall and Spring: 3-9 units
Continues 57-784 Accompanying IV.

57-786 Collaborative Piano VI Fall and Spring: 3-9 units
Continues 57-785 Accompanying V.

57-788 History Proficiency Fall and Spring: 0 units
Course Description TBA.

57-789 Theory Proficiency Fall and Spring: 0 units
Course Description TBA.

57-790 Outreach Performance Fall and Spring: 0 units
Course Description TBA.

57-791 Keyboard Studies Fall and Spring: 3-6 units
Course Description TBA.

57-792 Keyboard Studies Fall and Spring: 3-6 units
Prerequisites: 57791

57-793 Comprehensive Review (Analysis) Fall and Spring: 0 units
Course Description TBA.

57-794 Comprehensive Review (Notes) Fall and Spring: 0 units
Course Description TBA.

57-795 Comprehensive Review (Analysis/Paper) Fall and Spring: 0 units
Course Description TBA.

57-796 Graduate Composition Project Fall and Spring: 0 units
Course Description TBA.

57-798 Graduate Recital Fall and Spring: 0 units
Course Description TBA.
57-800 COMPREHENSIVE REVIEW (MUSIC ED)
FALL AND SPRING: 0 UNITS
Course Description TBA.

57-801 INTRODUCTION TO MUSIC TECHNOLOGY
FALL AND SPRING: MINI SESSION - 6 UNITS
This course gives an overview of music technology through practical information and several hands-on projects. Concepts such as MIDI and digital audio are introduced and specific topics are covered in detail including sequencing, music notation, digital recording, mixing, and production. Throughout the course, students are required to complete several projects and create musical compositions in styles of their own choosing. The student is not graced on the “musicality” of these compositions, but instead on how well they met the stated project goals by correctly using specific equipment and/or computer programs.

57-802 FINALE
SPRING: 6 UNITS
This course provides hands-on and in-depth instruction of the Finale music notation program by Coda Music Software. Students will learn how to efficiently use the various notation tools that Finale has to input, edit, and manipulate music. MIDI input, playback, and transcription will also be covered to allow students to quickly notate and hear their music. The course goal is to create professional looking printed scores and parts in a variety of styles from Classical to Contemporary. A basic knowledge of music notation is required.

57-807 VOCAL METHODS
SPRING: 3 UNITS
This course is designed to enable each student to develop a pleasant, healthy and musically expressive voice and effective vocal pedagogy.

57-808 OBSERVATION
FALL: 3 UNITS
This music education offering is an independent study course designed to introduce students to a range of K-12 instructional practices through observation of elementary and secondary school teachers. Students will identify strategies that impact learning in the areas of pedagogy, student motivation, classroom management, and accommodations for special learners. Students complete this course by arranging 20 prescribed classroom observations in local schools — multiple observations may be completed at each school visit. In order to complete the observations in one semester, students should schedule an open 3-hour time block one day per week between 8 am and 3 pm.

57-810 ENSEMBLE ELECTIVE
FALL AND SPRING: 3-6 UNITS
Course Description TBA.

57-817 MAJOR VOCAL PERFORMANCE ENSEMBLE
FALL AND SPRING: 6 UNITS
Course Description TBA.

57-818 MAJOR INSTRUMENTAL ENSEMBLE
FALL AND SPRING: 6 UNITS
There are three instrumental ensembles: Contemporary Ensemble, Orchestra and Wind Ensemble. Rotating seating plans, within and between ensembles, will prevail at the discretion of the Director of Orchestral Studies and the Director of the Wind Ensemble. The instrumental faculty will be consulted. All music majors who are required to enroll in an instrumental ensemble must audition for placement and enroll in Major Instrumental Ensemble. Audition required.

57-819 CHORUS
FALL AND SPRING: 6 UNITS
Course Description TBA.

57-823 GERMAN STAGE DICTIO
SPRING: 3 UNITS
Course Description TBA.

57-824 PERCUSSION ENSEMBLE
FALL AND SPRING: 3 UNITS
Course Description TBA.

57-827 JAZZ ORCHESTRA
FALL AND SPRING: 3 UNITS
Course Description TBA.

57-828 THEATRE ORCHESTRA
INTERMITTENT: 3-6 UNITS
Course Description TBA.

57-830 MUSIC OF IRAN
FALL: 9 UNITS
The Aryan civilization is one of the oldest continuing civilizations in the world. Music has played an important role in the continuation and preservation of this ancient culture. In this course, the traditional, folk, and contemporary music of Iran will be studied and discussed. The focal point of the course will be the Persian modal system, the Dastgâh. Starting with a historical survey of the ancient and medieval Persian music, different aspects of the Dastgâh system will be demonstrated and discussed. In addition, religious music and folk music of Iran as well as Iranian contemporary music will be discussed during the course. This course can count as music support for graduate students.

57-831 PRINCIPLES OF EDUCATION
FALL: 9 UNITS
This course introduces the student to basic issues in education. Content includes views of the academic and social structure of the school and the review and application of widely recognized theories of learning. Special emphasis is placed on the study of pedagogy as a series of options from which the educator constructs learning activities.

57-833 BAND AND CHORAL ARRANGING
SPRING: 6 UNITS
This course familiarizes students with basic techniques of arranging for high school choral and instrumental ensembles. Individual instruments and voices are reviewed for their best scoring properties, and a systematic process of score analysis is used to reveal approaches to scoring traditional and unusual sounds.

57-834 FUNDAMENTALS OF MARCHING BAND
FALL: 3 UNITS
A marching band, due to its visibility and high degree of student involvement, is an integral part of secondary school music programs. The well-schooled music education graduate must have knowledge of this unique form of music performance. This course, designed primarily for those seeking a career in teaching, will accommodate students with no experience and others who have participated in marching band. Among the many areas of concentration will be: philosophy, show charting, marching fundamentals and commands, logistical awareness, and budget formulation. Observation of and active assistance with Carnegie Mellon’s Kiltie Band will be part of the course content.

57-845 MESSIAEN
INTERMITTENT: 9 UNITS
Olivier Messiaen (1908–1992) is increasingly recognized as a giant of twentieth-century classical music. Having published works in eight different decades, he bridges the world of Wagner and Debussy with that of Grisey and Saariaho. While focusing on Messiaen’s music, this course will not lose sight of the extensive range of non-musical references that make his work less an oeuvre than a cosmology. We begin with an overview of his four “eternal conflicts,” namely his harmonic and rhythmic techniques and his natural and supernatural sources of inspiration. We will study not only his Technique de My Musical Language and recent, posthumously published Treatise on Rhythm, Color, and Ornithology, but also his works Huit Préludes, Quartet for the End of Time, Vingt Regards sur l'Enfant-Jésus, Mode de valeurs et d'intensités, Oiseaux exotiques, Et exspecto resurrectionem mortuorum, Des Canyons aux étôles..., and Saint François d’Assise. We will read a new biography by Christopher, an excellent analytical introduction by Robert Sherlaw Johnson, and view the hilarious and provocative film about his early organ piece, Apparition of the Eternal Church.

This course asks: • What accounts for the coherence of this music assembled from disparate sources? • What relationship do his novel techniques have with earlier composers (Bach, Debussy) and with his famous students (Boulez, Grisey)? • What is the role of religious symbolism in his music? • What analytical tools are needed to do justice to music that is extremely rationalized yet, in its range of references, centrifugal? • And what relationship do these competing forces have to the music's expressive power? This course can count as music support for graduate students (and undergraduate students). Undergraduate students may register with instructor permission if space is available after graduate students have registered.
57-846 Bach
INTERMITTENT: 9 UNITS
This class will be a chronological retrospective of Bach’s life and works, covering all major aspects of his instrumental and vocal music; part historical and part analytical. We will be discussing the principles of historically informed performance practice in relation to modern and period instrument performances of his music. We will show how musicologists use the evidence that Bach left behind to understand his intentions. We will present the cantatas and Passions, instrumental music (solo, chamber, and orchestral), and finish up with the masterpieces of his final decade: B Minor Mass, Goldberg Variations, Musical Offering, and the Art of the Fugue. The class is open to all interested students with an interest in baroque and classical music. The class is open to all interested students with an interest in baroque and classical music.

57-847 Electronic and Computer Music
FALL and SPRING: 6 UNITS
The purpose of this course is to introduce the students to the Computer- Electronic Music Studio and to elementary techniques of composition utilizing the synthesizer and other sophisticated electronic equipment. Different digital and analog devices such as tape recorders, mixers, various synthesizers, as well as a range of computer music software will be demonstrated and discussed. Required for composition majors.

57-851 Teaching Artist Training
INTERMITTENT: 6 UNITS
Course Description TBA.

57-852 Performance Practice of Telemann and Bach
INTERMITTENT: 6 UNITS
This class will be an interactive performance-based exploration of the chamber music of Telemann and Bach. It is open to all interested graduate instrumentalists and singers, undergraduate instrumentalists and singers by instructor permission, with flute, string, and keyboard majors particularly encouraged to attend.

57-854 Performance Practice of the 18th Century
INTERMITTENT: 6 UNITS
This class will be devoted to exploring many topics involved in performing Baroque and Classical period music through awareness of authentic performance practice. There will be weekly in-class performances by students based on the topics under discussion.

The following repertoire will be covered:
J.S. Bach French and English Suites
W.F.Bach Sonatas for Two Flutes
Telemann Methodical Sonatas
Corelli Violin Sonatas
Couperin Concertos Royaux

Topics will include:
Music as Conversation
Ornamentation/Improvisation
Concept of Sound Production
Inegal/Rubato
Playing Adagios/Trills
Use of Vibrato
Key Meanings/Affects
Source Materials
Performing/Stage Fright

The class will be open to undergrad and grad performers on all instruments plus vocalists and composition students.

57-855 Secondary Guided Teaching
SPRING: 3 UNITS
This course develops understanding and application of appropriate and acceptable instructional practices in the secondary school. The student will spend a portion of the course in an assigned public or private school teaching internship.

57-856 Elementary Guided Teaching
FALL: 3 UNITS
This course provides for observation and closely supervised teaching experiences with elementary age children in a school setting.

57-860 Brass Methods
FALL: 3 UNITS
This music education course develops basic brass playing and teaching techniques for beginning and intermediate instrument classes. The course includes training in beginning band program design, aural & visual diagnosis of individual and ensemble playing problems, and methods of accelerating music reading independence in young players. The course requires two off-campus field teaching experiences in local schools. Each field teaching experience will require about 3 hours to complete -- students should allow enough time in their schedules to complete this requirement.

57-861 Percussion Methods
FALL: 3 UNITS
This class gives the non-percussion major a background in the fundamentals of teaching percussion. The main focus of the course is snare drum. The students spend most of their time learning the basic concepts of beginning snare drum so they will be prepared to teach beginning students of any grade level. Much time is devoted to proper stance, grip, and stroke, in order to insure a good foundation for a beginning student. Also covered are the various mallet instruments, timpani and all small hand percussion. Students learn about purchasing proper equipment for the various levels of learning in common school programs.

57-862 Woodwind Methods
SPRING: 3 UNITS
This music education course develops basic woodwind playing and teaching techniques for beginning and intermediate instrument classes. The course includes training in beginning band program design, aural & visual diagnosis of individual and ensemble playing problems, and methods of accelerating music reading independence in young players. The course requires two off-campus field teaching experiences in local schools. Each field teaching experience will require about 3 hours to complete -- students should allow enough time in their schedules to complete this requirement.

57-863 String Methods
SPRING: 3 UNITS
String Methods is designed to prepare music educators for work in the public schools. A major portion of class time will be applied to violin and cello techniques. Upon completion of the course, the student will be expected to demonstrate the technical skills of a second year beginning string student. Students will also be introduced to various method books, string supplies, and repairs.

57-865 Eurhythms for Graduate Music Students
INTERMITTENT: 3 UNITS
Rhythm is about time and timing. Dalcroze Eurhythms is an exploration of the rhythm inside us. Experiencing rhythm through music and movement brings awareness and understanding of our own inner rhythm as well as rhythm in all the arts and beyond. For musicians, meaningful rhythmic movement reinforces under-standing of music concepts while focusing awareness on the physical demands of artistic performance. This approach to musical problem solving is applicable also to studio and classroom teaching.

57-870 Stage Direction
SPRING: 3 UNITS
This course provides an internship working with a middle or high school music theater production. Students may participate in coaching, direction, and choreography. In addition, they keep a journal of their experiences and submit a final paper describing what they have learned from working with the teachers or professional directors who were responsible for the production. It is suggested that this course be taken during the spring semester when most music theater productions are scheduled.

57-871 Introduction to Music Technology (Self-Paced)
FALL and SPRING: MINI SESSION - 6 UNITS
This course gives an overview of music technology through practical information and several hands-on projects. Concepts such as MIDI and digital audio are introduced and specific topics are covered in detail including sequencing, music notation, digital recording, mixing, and production. Throughout the course, students are required to complete several projects and create musical compositions in styles of their own choosing. The student is not graded on the "musicality" of these compositions, but instead on how well they meet the stated project goals by correctly using specific equipment and/or computer programs. This is a self-paced version of the 57-801 course. There are no required classes, and students should be prepared to make time in the evenings or weekend to work on their projects in either the MTC (MM119A) or
some other cluster. There is a "help session" every week where the students can come to work on their projects or to ask questions about the material. All material and project descriptions are on Blackboard. In addition to the required projects, there is a final exam which can be taken either on paper or online.

57-872 Creative Orchestration
Fall: 6 Units
In Creative Orchestration students orchestrate their own ideas thinking orchestrally and writing directly for the orchestra. Throughout the course the students have to write their exercises in a traditional music language and in a contemporary-avant-garde one. The goal is to make students technically versatile within the two extremes of the music spectrum. There is discussion of art and its parallels in compositional styles: impressionism, cubism, surrealism, abstract expressionism, collage, etc.

Undergraduate composition majors can take this course after completing Orchestration II (in which the students orchestrate fragments of already existing compositions for piano, encompassing classical, romantic, nationalist, impressionist, neoclassic, atonal and avant-garde-aleatoric styles) and 20th-21st Century Techniques.

Registration for this course requires special permission. If you are interested in registering for it, please contact Sharon Johnston.

57-874 Music in the Urban School
Intermittent: 9 Units
This course will involve workshops with nationally known instructors in eurythmics, world drumming, contemporary popular music, and classroom management. The course will require attendance at workshops, classroom observations, and closely supervised teaching experiences. Schools involved are all inner city schools with a poverty level of 75% or above.

This course is offered as the result of a grant received from the Federal Department of Education by the School of Music, the Pittsburgh Public Schools, and the Wilkinsburg School District.

57-875 Music in the Elementary School
Fall: 6 Units
This course provides a philosophical background for teaching music in the elementary school and provides a variety of pedagogical techniques and materials which are useful for teaching music from Preschool through Grade 6.

57-876 Music in the Secondary School
Spring: 6 Units
This course covers a variety of topics related to the development of instructional skills and the management of administrative details of classroom and rehearsal planning, student recruitment, and first-year teacher concerns such as yearly planning, relations with parents, and student discipline.

57-881 Piano Literature and Repertoire I
Fall: 6 Units
This course is an intensive study of the development of Keyboard Literature. Performance practices pertinent to specific periods and styles are explored in depth. The importance of historical, sociological, and technological factors is emphasized. Understanding the impact of all the arts on music is an important component of the four-semester sequence. Piano Literature and Repertoire is required for all graduate piano majors.

57-882 Piano Literature and Repertoire II
Spring: 6 Units
Continues 57-881 Piano Literature and Repertoire I.

57-883 Piano Literature and Repertoire III
Fall: 6 Units
Continues 57-882 Piano Literature and Repertoire II.

57-884 Piano Literature and Repertoire IV
Spring: 6 Units
Continues 57-883 Piano Literature and Repertoire III.

57-887 Professional Essentials for the Percussionist
Fall and Spring: 3 Units
Course Description TBA.

57-888 Instrumental/Choral Conducting
Spring: 6 Units
This offering continues the development of skills in conducting gesture, score analysis, and rehearsal technique necessary to realize the effective interpretation of choral and instrumental scores. Special focus is given to the understanding of choral performance. Routine administrative issues facing the conductor are presented.

57-889 Practice Teaching (Elementary)
Fall and Spring: 6-18 Units
Experience in working with elementary students in a public school setting. The teaching is supervised by an experienced public school teacher and members of the CMU music education faculty.

57-890 Practice Teaching (Secondary)
Fall and Spring: 6-18 Units
Experience in working with secondary students in a public school setting. The teaching is supervised by an experienced public school teacher and members of the CMU music education faculty. Students may choose a vocal or instrumental emphasis in the secondary placement.

57-891 Dalcroze Pedagogy-Practice Teaching
Fall: 3 Units
This course gives hands-on experience in applying Dalcroze principles in teaching situations. It is designed for students interested in learning about the teaching of Eurythmics, general Music Education, and for those considering the Dalcroze Certificate. The class will meet in a three week rotation of two Thursday evenings followed by a Saturday morning with the Preparatory School children's classes.

57-893 Introduction to Conducting
Fall: 6 Units
This offering introduces the skills of conducting gesture, score analysis, and rehearsal technique necessary to realize the effective interpretation of choral and instrumental scores. Special focus is given to the understanding of wind and percussion performance.

57-898 Graduate Recital
Fall and Spring: 0 Units
Course Description TBA.

57-900 Advanced Bagpipe and Drum Band
Fall and Spring: 3 Units
Course Description TBA.

57-901 Music Research Methods
Fall: Mini Session - 3 Units
This course helps music graduate students identify, use and understand basic music reference materials. It is designed to be helpful to students interested in any aspect of graduate study: performance, theory and composition, history and literature, conducting, education, etc. Students learn to gather, correctly cite and organize information. Emphasis is also placed on proper grammar, spelling, and punctuation. As a final project, students are asked to write program notes.

57-902 Alexander Technique for Musicians
Fall and Spring: 3 Units
Course Description TBA.

57-904 String Quartet: A Social History
Intermittent: 9 Units
The string quartet is at once a medium and a genre, even a form which for more than two hundred years has had a special, unparalleled place in Western music. This course examines the development of the string quartet - from its function as an intimate and conversational social setting for amateurs, to its role as a secret repository of composers' most daring thoughts. The string quartet repertoire under discussion spans the first attempts at string quartet writing in the 17th Century, to serialism and microtonal disintegration in the 1960's, to contemporary Pop-Rock fusion experiments. This course also deals with the social and personal histories of four individuals who freed themselves from hegemonic orchestral rules in favor of an instrumental democratic microcosm. This course can count as music support for graduate students.

57-907 Secondary Studio
Fall: 3-9 Units
Course Description TBA.

57-908 Secondary Studio
Spring: 3-9 Units
Course Description TBA.
This course provides an opportunity to navigate the seas of contemporary music by focusing on composers both celebrated and young. We also discuss major musical works, styles, movements, genres, and performers of contemporary music. In addition, we learn how music has helped to define modernism and postmodernism, and read cultural criticism on how the Cold War and capitalism have affected musical life since 1945. This course can count as music support for graduate students (and undergraduate students). Undergraduate students may register with instructor permission if space is available after graduate students have registered.

57-912 OPERA SINCE WAGNER
INTERMITTENT: 9 UNITS
In the 400-year arc of opera history, the last 125 years have seen the genre’s apogee, perigee, and current renaissance. Between the Wagnermania of the late nineteenth century and today’s vogue for both opera and “popera,” new opera production slowed greatly in the third quarter of the last century as composers rejected its traditions and audiences had increasingly to rock and pop. In this course, we will survey this trajectory by viewing and analyzing eight repertory staples: Wagner – Parsifal Debussy – Pelléas et Mélisande Puccini – Turandot Berg – Wozzeck Gershwin – Porgy and Bess Britten – Peter Grimes Messiaen – Saint François d’Assise Reich – Three Tales
We will also become acquainted with other works related to these staples, from Strauss to Saariaho and Tan Dun, and ask numerous questions. What can these operas’ characters and techniques tell us about late modern subjectivity? What happened to the great national operas? Is the musical style of opera generated from and generated to the performance forces and media?
The goals of this course are to 1) promote intimate knowledge of the eight core operas; 2) encourage familiarity with numerous related opera plots, opera composers, and twentieth- and twenty-first-century musical styles; 3) broaden literary and musical analysis to include historical, aesthetic, and (multi)cultural perspectives on opera; and 4) improve oral and written communication skills about opera.
Requirements: Attendance at opera screenings, readings, quizzes, small written assignments, and a 17– to 20-page research paper on an opera of your choice written since 1850.
Required text: Mervyn Cook, ed. The Cambridge Companion to Twentieth-century Opera (2005). This course can count as music support for graduate students.

57-913 THE KEY TO BEETHOVEN
INTERMITTENT: 6 UNITS
Have you ever wondered whether Beethoven had a favorite key, or whether he was composing with certain keys in mind? Is there something unique about his A flat major compositions? Were there keys that he was intentionally avoiding?
This course is designed to examine the majority of Beethoven's instrumental repertoire and identify tonal archetypes upon which he was composing, with the intention to develop a thorough understanding of the emotional content of each tonality in Beethoven’s output. This course can count as music support for graduate students.
Repertoire covered: Piano Sonatas / Piano Concertos Piano Trios / Symphonies String Quartets / Violin Sonatas Violin Concerto / Cello Sonatas Triple Concerto

57-914 MUSIC AND NATURE
INTERMITTENT: 9 UNITS
Musicians and philosophers have long explored the rapport between music and nature, tracing music’s origins alternatively to nature and human culture and defining nature differently according to their time and place. This course will examine the opposition between nature and culture through both musical compositions and philosophical writings. We will study theories of the origin of music (from Lucretius to bioacoustics), theories of music that seek justification by appealing to nature (from Boethius to Grisey), and theories that question whether natural sounds can be music. We will also examine musical representations of place, weather, and animals through the perspectives of ecocriticism and notions of the pastoral.

This course can count as music support for graduate students.

57-915 MOZART'S OPERAS
INTERMITTENT: MINI SESSION - 6 UNITS
In the genre with the highest stakes and the highest failure rate, Mozart composed the earliest operas to have staked a permanent place at the center of the repertory. This course seeks to account for his success, to explain why he succeeded where others failed and what has made his operas beloved for over 225 years. We begin with a brief overview of all of Mozart’s operas and discuss the types of opera in circulation in late 18th century Austro-Hungary, especially opera seria, opera buffa, and Singspiel, and the pressures that shaped the music and libretto of each production, from the type of patronage to the style of recitative. Then we examine The Marriage of Figaro, Don Giovanni, and The Magic Flute at a pace of about one act per class session, looking at poetry, dramaturgy, stagecraft, acting, performance practice, character development, theme, and politics, and always through the filter of Mozart’s music, especially its melody, reform elements, blurring of genre and affect, vocal counterpoint, use of topics, and musical symbolism. This course can count as music support for graduate students.

57-923 REPertoire ORCHESTRA
FALL AND SPRING: 3 UNITS
This course thoroughly acquaints participants with the standard works one would expect to encounter as part of a career as an orchestral player. Assigned repertoire will be read each class session. All students are eligible to register for this course by special permission. Students who are not placed in the Carnegie Mellon Philharmonic are given priority for registration.

57-925 SYMPHONIES OF MAHLER
INTERMITTENT: 9 UNITS
The eleven symphonic works of Mahler will be analyzed in relation to their form, melodic and harmonic content, counterpoint, orchestration, program, and emotional content. Further topics of discussion will be Mahler’s use of beauty sentimentally, banality, tragedy, irony, and humor to present the ‘Whole Truth’ in his symphonic writing. The class will be very interactive with each student expected to make an oral presentation and write a research paper on a symphony of their choice. This course can count as music support for graduate students (and undergraduate students). Undergraduate students may register with instructor permission if space is available after graduate students have registered.

57-926 CHAMBER MUSIC: STRING QUARTET
FALL AND SPRING: 3 UNITS
Provides an opportunity for students to play in small ensembles, advised by faculty coaches. The performers will develop effective rehearsal techniques, explore chamber music repertoire, deal with issues of intonation and balance, and arrive at interpretive conclusions that are stylistically sound, yet individualistic and creative. A performance is required each semester.

57-927 ADVANCED SEMINAR IN FILM MUSICOLOGY
INTERMITTENT: 9 UNITS
This course is designed for advanced students who wish to explore and apply to film scores analytical methodologies pertaining to historical musicology, cultural studies, and genetic criticism. The material used in the course is drawn from the Scarcecrow Film Score Guides with particular emphasis on Bernard Herrmann’s Vertigo by David Cooper, Erich Wolfgang Korngold’s The Adventures of Robin Hood by Ben Winter, Alex North’s A Streetcar Named Desire by Annette Davison, Nino Rota’s The Godfather Trilogy by Francesco Scacciameo, Miklos Rossa’s Ben-Hur by Roger Hickman, Jerome Moross’ The Big Country by Mariana Whitmer, and Leonard Bernstein’s On the Waterfront by Anthony Bushard. Students will gain an appreciation for the authors’ methodological criteria and ultimately will formulate their own through
written and oral presentations about film scores of their own selection. When possible the authors listed above will participate to the seminar in person or through video connection. Prerequisites include knowledge of music history, theory, practice, and the instructor's permission. This course can count as music support for graduate students.

57-928 CHAMBER MUSIC: WOODWIND AND MIXED FALL AND SPRING: 3 UNITS
Through rehearsal, coaching, and performance, ensembles solve problems of intonation, balance, and interpretation.

57-929 CHAMBER MUSIC: WOODWIND AND MIXED FALL AND SPRING: 3 UNITS
Through rehearsal, coaching, and performance, ensembles solve problems of intonation, balance, and interpretation.

57-930 BAROQUE ENSEMBLE FALL AND SPRING: 3 UNITS
CMU Baroque is a performance ensemble exploring the interpretation and performance of Baroque music on modern instruments, with a focus on the instrumental and vocal works of Bach, Telemann, Haydn and Mozart. It is open to all interested graduate instrumentalists and singers by instructor permission.

57-931 CHAMBER ENSEMBLE INTERMITTENT: 3 UNITS
Provides an opportunity for students to play in small ensembles, advised by faculty coaches. The performers will develop effective rehearsal techniques, explore chamber music repertoire, deal with issues of intonation and balance, and arrive at interpretive conclusions that are stylistically sound, yet individualistic and creative.

Low Brass Ensemble: The low brass ensemble pushes the boundaries of what is "supposed" to be played by an ensemble of this type. Players will be involved in the programming, arranging and planning of performances and will learn valuable musical, creative, promotional and organizational skills.

57-933 SONATAS FALL AND SPRING: 3 UNITS
This course focuses on coaching of performance groups with two members. It parallels Chamber Music, which focuses on coaching of performance groups with three or more members.

57-934 ADVANCED ANALYTICAL TECHNIQUES FALL: 6 UNITS
Advanced Analytical Techniques is a "Music Support" course for graduate students who have passed their music theory competency exams and have completed an undergraduate course of study in harmony and counterpoint. This course provides an in-depth knowledge of all styles and genres of Western classical and contemporary repertoire. The course will cover units in harmonic and motivic analysis, Schenkerian analysis, graphic analysis, twelve-tone analysis, set-class theory, rhythmic analysis and other analytical techniques. The primary goal of the course is for students to develop independent skills in analyzing their own repertoire as performers, conductors, composers and teachers.

57-935 CHAMBER MUSIC: BRASS FALL AND SPRING: 3 UNITS
Through rehearsal, coaching, and performance, ensembles solve problems of intonation, balance, and interpretation.

57-936 FROM BEETHOVEN TO BERG INTERMITTENT: 6 UNITS
This course helps students achieve a broad and in-depth knowledge of the European music of the 18th, 19th, and 20th Centuries. Starting with a demonstration of various analytic techniques, compositions of Beethoven, Schubert, Strauss, Debussy, Bartok, Stravinsky, Schoenberg, Webern, and Berg will be analyzed and discussed.

Participating students should have in-depth knowledge of harmonic progression and chord structure (Classical and Romantic music) and of musical forms, especially the sonata form. Students are required to make score reductions and prepare short scores of the pieces that are analyzed in class every week. All projects must be submitted on time. The class is designed and will be conducted like a group studio. Every individual student's score reduction/analysis will be reviewed. The course is open to composers, conductors, and performers. This course can count as music support for graduate students (and undergraduate students). Undergraduate students may register with instructor permission if space is available after graduate students have registered.

57-937 BRAHMS SYMPHONIES INTERMITTENT: 6 UNITS
Symphonies of Johannes Brahms are the monumental master works of music. In this course, the first symphony of Brahms will be thoroughly analyzed. All aspects of this work (harmonic progression, form, orchestration, rhythm, and phrasing) will be examined and discussed.

Because of the extreme complexity of Brahms' music, a strong background in harmony, chord progression and voice leading as well as a solid background in musical forms, especially sonata form, are required for taking this course. This is a "studio" course. The class will be divided into four sections of three or four students per section. Each section will meet with the instructor individually for one hour per week. This course can count as music support for graduate students (and undergraduate students). Undergraduate students may register with instructor permission if space is available after graduate students have registered.

57-941 DALCROZE RESEARCH PAPER INTERMITTENT: 3 UNITS
Candidates for the Dalcroze Certification Program are required to submit a research paper.

57-945 DEBUSSY ANALYSIS INTERMITTENT: 6 UNITS
In recent years Claude Debussy has come to be regarded as one of the most revolutionary composers of the 20th century. In this course, two orchestral works of Debussy, "Nocturnes" (1899), and "La Mer" (1905), will be thoroughly analyzed. All aspects of these compositions will be examined and discussed. Course requirements: This is an advanced graduate theory course. Debussy's music is quite complex and requires a certain degree of preparation. Students will need to have: -a strong background in harmony, chord progression, and voice leading. -a firm grasp of musical forms. Course Schedule: Debussy Analysis is a "studio" course. The class has been divided into small groups of two or three students per group. Each group will meet with the instructor individually for one hour per week. Debussy's "Nocturnes" and "La Mer" will be analyzed measure by measure. All aspects of these compositions (harmony, form, rhythm, thematic development, orchestration, phrasing, etc...) will be thoroughly discussed. This course can count as music support for graduate students (and undergraduate students). Undergraduate students may register with instructor permission if space is available after graduate students have registered.

57-946 STYLE CHANGE ACROSS THE 18TH CENTURY INTERMITTENT: 9 UNITS
The eighteenth century saw radical changes in musical style that would not be matched until the early twentieth century. Although they are often masked by overarching terms such as 'common-practice tonality,' the differences between Corelli and early Beethoven in terms of basic compositional practice – that is, in terms of harmony, meter, and form – represent a fundamental change in musical language. In contrast, the differences between Mozart and Mahler simply represent different stages within a single evolutionary development.

Guided by readings from music theory and historical musicology, as well as by our own analyses of scores, this course will attempt to chart these developments across three musical styles that overlap both in time and in substance: the baroque, the galant, and the classical. Focusing especially on composers from Bach to Mozart, the twin goals will be to understand individual works in relation to their own style-historical moments, and an understanding of how musical style changed over the course of the century.

This course presupposes a strong grounding in the basics of tonal harmony and form. This course counts as music support for graduate students.

57-947 SOUND RECORDING FALL AND SPRING: MINI SESSION - 6 UNITS
This course centers around the recording studio in the School of Music: how the studio works, and how to record various types of music, including classical music, using the recording studio and Kresge Recital Hall, which has audio and video links to the recording studio. The method of instruction is to learn by doing, and the goal, from the very first session, is to achieve professional-sounding results. Equipment includes a complete 24-track Pro-Tools system, professionally designed control
room that can accommodate up to 24 people, outboard preamps and other gear, and an interesting array of microphones. All recording is direct to hard disc.

57-948  Sound Editing and Mastering
FALL AND SPRING: MINI SESSION - 6 UNITS
This course will teach the first step in the process of creating a professional finished audio product. "Editing" is the art of piecing together different takes to make one final "good take." "Mastering" is the art of polishing the "good take" to perfection--balancing all the instruments and tracks, adding special effects, setting final levels. If 'recording' seems like an high-energy activity--involving engineers, musicians, producers--"editing and mastering" are the necessary counterparts--long tedious hours of solitary confinement honing the skills of the mastering engineer. Those taking this course are expected to have significant music skills: actively playing a musical instrument (or composition), and/or the ability to read a piano score at the least, and a full orchestra score from any recent century, including our own, at the most.

57-949  Multitrack Recording
SPRING: MINI SESSION - 3 UNITS
This course builds upon the ideas learned in Sound Recording (57-947), but with an emphasis on close microphone techniques and popular music styles. Students will work in small groups and complete at least two recording projects. $10.00 materials fee.

57-950  Live Recording Laboratory
FALL: 12 UNITS
Course Description TBA.

57-951  Live Recording Laboratory
SPRING: 12 UNITS
Course Description TBA.

57-952  Studio Recording Laboratory
FALL: 12 UNITS
Course Description TBA.

57-953  Studio Recording Laboratory
SPRING: 12 UNITS
Course Description TBA.

57-954  Shaping Time in Performance
INTERMITTENT: 9 UNITS
This course will look at basic questions that performers face: Which level of pulse do I want to feel as the main one? How can I shape a pulse expressively? Which measure in a phrase is felt as a main goal, especially when the phrase contains an unusual number of measures? How can multiple tempi be meaningfully related? Among many important formal arrival points, which are the most important? In addition to these questions, we will also look at recent work on ways in which 18th-century musicians may have understood meter very differently from most musicians today. These alternate perspectives open new possibilities for hearing and shaping the flow of musical time in baroque and classical music. These issues will be pursued from two directions. We will develop simple theoretical tools that can make score analysis a helpful input to the decisions that performers make about such questions. We will also examine audio and video recordings by famous artists to see both how they dealt with these issues and what new questions are raised. Week-to-week work will include reading, listening, and score analysis. Students will write term papers that either use one of the main perspectives developed in class (starting from scores or starting from recordings) or else combine the two. They will also give presentations about their projects to the class. This course can count as music support for graduate students.

57-955  Post Modernism in Music and Analysis
INTERMITTENT: 9 UNITS
This seminar will examine in detail the philosophical shift from modernism to postmodernism in both music and how we interpret music. Selected 20th and 21st-century works will be examined in detail with special emphasis on their identity as music, their social function, and interpretive strategies. In addition, postmodern-interpretive strategies will be explored in other musical contexts. This course can count as music support for graduate students.

57-965  Repertoire Analysis
FALL AND SPRING: 6 UNITS
The goal of this course is to train students in the analytic techniques of the music of the 17th, 18th, 19th, and 20th Centuries. Students are required to prepare and perform four-part transcriptions of chorales by J.S. Bach. Students are also asked to prepare short scores and analyze the harmonic progression, orchestration, form, and articulation/phrasing of selected repertoire. This course counts as music support for graduate students.

57-969  Score Reading/Keyboard Harmony
SPRING: 6 UNITS
This course is for pianists, organists, and other musicians with good keyboard skills. It is a practical, hands-on learning experience. Students learn by doing and observing other students. All work is done at the keyboard. This course can count as music support for graduate students.

57-970  Music and Technology Seminar
FALL AND SPRING: 1 UNIT
Course Description TBA.

57-971  Music and Technology Performance/Thesis
FALL AND SPRING: 1-36 UNITS
Course Description TBA.

57-973  Piano Pedagogy I
FALL: 6 UNITS
This course gives a historical overview of Piano Pedagogy and its significant development over the past thirty years. The class covers beginning technique, sequencing of concepts and materials, common problems of the beginner, practicing, motivation, and parental involvement. The course also surveys and evaluates current representative beginning piano methods.

57-974  Piano Pedagogy II
SPRING: 6 UNITS
This course goes beyond the first years of beginning students towards the intermediate and early advanced levels. Questions such as "What is a good piece?" and "what is style?" are studied and evaluated.

57-975  Piano Pedagogy III
FALL: 6 UNITS
This class studies intermediate literature, analysis, teaching, and performance.

57-976  Piano Pedagogy IV
SPRING: 6 UNITS
This class studies early advanced literature, analysis, teaching and performance.

57-980  Seminar in Music Education
INTERMITTENT: 9 UNITS
This is a required core course for the MM degree in Music Education. Students identify and discuss current trends and issues in music education. From these topics, students, together with the professor, select one to pursue in depth. Depending on the topic, school observations, research, or teaching experiences lead to the completion of a project, usually a paper.

57-981  Foundations of Pedagogy in Music Education
INTERMITTENT: 9 UNITS
A survey of current and historical issues in education that inform effective classroom and rehearsal instruction in terms of course content, delivery strategies, and assessment options. Topics include the nature of education and teaching, best practices pedagogy, music as an aesthetic experience, and developmental & social psychology issues in music education.

57-982  Research in Music Education
INTERMITTENT: 9 UNITS
This course surveys significant, recent research in music education. Students design and implement a project that can be either academic or applied research. The research, outcomes, and analysis are presented in writing and orally.
57-983 Music Education Performance Lecture Recital
Fall and Spring: 3-12 Units
Course Description TBA.

57-984 Music Education Composition Concert
Fall and Spring: 3-12 Units
Course Description TBA.

57-985 Computer Technology in Music Education
Intermittent: 9 Units
The modern classroom makes increasing use of computer technology for teaching and communication, and the music classroom is no exception. This course addresses these questions: How can the music teacher use computer technology in the classroom? What music technologies are appropriate for elementary and secondary level classes? What resources are available online? Projects will include creating arrangements in Finale, a classroom blog based on existing examples, sample lesson plans, and a hypothetical budget for a music classroom computer system. This course is available only to graduate music education students.

57-986 Advanced Music Studies Studio (Individual)
Fall and Spring: 18 units
Course Description TBA.

57-987 Advanced Music Studies Studio (Orchestral)
Fall and Spring: 18 units
Course Description TBA.

57-988 Advanced Music Studies Studio (Chamber Mus.)
Fall and Spring: 18 units
Course Description TBA.

57-989 Advanced Music Studies Studio (Piano Maint.)
Fall and Spring: 18 units
Course Description TBA.

57-990 Advanced Music Studies Recital/Project
Fall and Spring: 0 units
Course Description TBA.

57-991 Artist Diploma Recital
Fall: 0 units
Course Description TBA.

57-992 Artist Diploma Recital
Spring: 0 units
Course Description TBA.

57-993 Artist Diploma Recital
Fall: 0 units
Course Description TBA.

57-994 Artist Diploma Recital
Spring: 0 units
Course Description TBA.

57-995 Thesis in Music Education
Fall and Spring: 3-15 Units
Research document on a topic in music education completed in partial fulfillment of the master of music degree in music education.

57-996 Artist Diploma Studio
Fall and Spring: 36 units
Course Description TBA.

57-997 Artist Diploma Studio
Fall and Spring: 36 units
Course Description TBA.

57-998 Artist Diploma Studio
Fall and Spring: 36 units
Course Description TBA.

57-999 Artist Diploma Studio
Fall and Spring: 36 units
Course Description TBA.