School of Music Courses

Note on Course Numbers
Each Carnegie Mellon course number begins with a two-digit prefix which designates the department offering the course (76-xxx courses are offered by the Department of English, etc.). Although each department maintains its own course numbering practices, typically the first digit after the prefix indicates the class level: xx-1xx courses are freshmen-level, xx-2xx courses are sophomore level, etc. xx-6xx courses may be either undergraduate senior-level or graduate-level, depending on the department. xx-7xx courses and higher are graduate-level. Please consult the Schedule of Classes (https://enr-apps.as.cmu.edu/open/SOC/SOCServlet) each semester for course offerings and for any necessary pre-requisites or co-requisites.

57-008 Vocal Master Class I
Fall and Spring
This is a group coaching class for freshmen voice majors.

57-009 Vocal Master Class II
Fall and Spring
This is a group coaching class for sophomore voice majors.

57-010 Voice Studio Performance Class
Fall and Spring
TBA.

57-015 Violin Studio Performance Class
Fall and Spring
TBA.

57-016 Viola Studio Performance Class
Fall and Spring
TBA.

57-018 Double Bass Studio Performance Class
Fall and Spring
TBA.

57-020 Flute Studio Performance Class
Fall and Spring
TBA.

57-021 Oboe Studio Performance Class
Fall and Spring
TBA.

57-022 Clarinet Studio Performance Class
Fall and Spring
TBA.

57-023 Bassoon Studio Performance Class
Fall and Spring
TBA.

57-030 Percussion Studio Performance Class
Fall and Spring
TBA.

57-100 Convocation
Fall and Spring: 1 unit
A weekly meeting for all music students that features lectures, concerts, and other presentations related to professional development.

57-101 Introduction to Music Technology
Fall and Spring: 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.

57-102 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 goal is to create professional-looking printed scores and parts in a variety of styles from Classical to Contemporary. Open to music majors only except by instructor permission. Introduction to Music Technology (57801/871) or equivalent experience required. Prerequisites: 57-101 or 57-171.

57-103 Elective Studio (Beginning Piano Class)
All Semesters: 3 units

57-109 Elective Studio (Guitar Class)
Fall and Spring: 3 units
Using classical and jazz guitar methods, this course is designed to provide a basic set of techniques that will allow students to pursue the avenue of guitar playing that most interests them. While emphasis will be on developing skills in playing the guitar, a basic understanding of the principles of music theory as applied to the guitar will also be acquired. While few students will find it possible to master all of the materials presented, an exposure to the many possibilities of musical expression available on the guitar and an understanding of basic music theory will help to broaden the students’ perspective and make future musical experiences, such as listening and performing, more rewarding. Each student is expected to have his/her own instrument. A guitar in good working condition is essential. An acoustic classical or steel string is preferred, an electric with a small battery operated amp is acceptable. Students having no previous training on the guitar will find this class most valuable.

57-110 Elective Studio (Voice Class)
Fall and Spring: 3 units
Students enrolled in group voice will gain an understanding of basic vocal technique and a variety of singing styles. Students will learn about proper breathing, tone production and posture. Vocal styles will include pop, jazz, musical theater and classical. Students will also explore harmonization, improvisation and audition techniques for the singer. This class is geared towards the beginning student.

57-111 Movement and Dance I
Fall: 3 units
The CMU School of Music movement curriculum is designed to expose students to various styles and genres of contemporary and traditional forms of dance and movement. Students will increase their technical proficiency and personal artistry in dance in order to expand their physical skills as vocal performance artists. Courses will: Improve students’ posture and strength, Increase proficiency in dance vocabulary, Increase ability to recognize, interpret and execute choreography, movement and staging direction, Enhance kinesthetic awareness and physical confidence and Improve overall health. With a focus on creativity and expression in movement, these courses concentrate on using the body as a tool in the creative process. Throughout “Movement and Dance I - IV”, courses will include movement fundamentals, modern dance, ballet, partnering, dance composition/improvisation; as well as mini-courses in dance forms which can include stage combat, Flamenco dance, pilates and ballroom dance.

57-112 Movement and Dance II
Spring: 3 units
The CMU School of Music movement curriculum is designed to expose students to various styles and genres of contemporary and traditional forms of dance and movement. Students will increase their technical proficiency and personal artistry in dance in order to expand their physical skills as vocal performance artists. Courses will: Improve students’ posture and strength, Increase proficiency in dance vocabulary, Increase ability to recognize, interpret and execute choreography, movement and staging direction, Enhance kinesthetic awareness and physical confidence and Improve overall health. With a focus on creativity and expression in movement, these courses concentrate on using the body as a tool in the creative process. Throughout “Movement and Dance I - IV”, courses will include movement fundamentals, modern dance, ballet, partnering, dance composition/improvisation; as well as mini-courses in dance forms which can include stage combat, Flamenco dance, pilates and ballroom dance. Prerequisite: 57-111.
57-149 Basic Harmony I  
Fall: 9 units  
This course deals with common-practice harmony. It includes triads and their inversions, tonality and modality, non-harmonic tones, cadences, and the basic concepts of modulation. It includes work on fundamentals for inexperienced students.

57-150 Basic Harmony II  
Fall: 9 units  
This course deals with common-practice harmony. It includes triads and their inversions, tonality and modality, non-harmonic tones, cadences, and the basic concepts of modulation. It includes work on fundamentals for inexperienced students.  
Prerequisite: 57-149.

57-151 Counterpoint in Theory and Application  
Fall: 6 units  
In Counterpoint in Theory and Application, students begin by learning the traditional five species of counterpoint in a tonal context. They then build on this foundation, learning to analyze music in terms of the underlying counterpoint and to apply this analysis to performance, and producing original tonal compositions in two voices.  
Prerequisites: 57-149 or 57-150 or 57-153.

57-152 Harmony I  
Fall: 9 units  
This course deals with common-practice harmony. It includes triads and their inversions, tonality and modality, non-harmonic tones, cadences, and the basic concepts of modulation.

57-153 Harmony II  
Spring: 9 units  
This course is a continuation of the study of common practice harmony, exploring dissonant and chromatic harmony.  
Prerequisite: 57-152.

57-161 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.

57-162 Eurhythmics II  
Spring: 3 units  
Eurhythmics II introduces combinations of binary and ternary metric units, mixed meters, changing meters, and notation and performance of cross-rhythms.  
Prerequisite: 57-161.

57-163 Eurhythmics III  
Fall: 3 units  
Eurhythmics is a unique approach to music learning developed by the Swiss composer and educator Emile Jaques-Dalcroze (1865-1950). Dalcroze discovered that meaningful rhythmic movement experiences away from their instrument allows students to focus awareness on the physical demands of artistic performance while demonstrating knowledge and understanding of the expressive/interpretive as well as the theoretical aspects of music. Sight reading, conducting, notation, analysis and improvisation are integral to the course. Eurhythmics III Course Content: Divisive vs Additive rhythm, Metric transformation, Irregular subdivisions of metric units, Cross rhythms of 3 against 4, 3 against 5, 4 against 5.  
Prerequisite: 57-162.

57-164 Eurhythmics IV  
Spring: 3 units  
Eurhythmics is a unique approach to music learning developed by the Swiss composer and educator Emile Jaques-Dalcroze (1865-1950). It is a process for awakening, developing and refining innate musicality through rhythmic movement, ear training and improvisation. Through rhythmic movement, students demonstrate knowledge and understanding of the expressive/interpretive as well as the metrical/structural aspects of music. Sight reading, conducting, notation, analysis and improvisation are integral to the course. Eurhythmics IV Course Content: More complex rhythmic problems encountered in composed music, Changing meters and changing metric units within a composition, Rhythm reading of patterns using small note values, Messiaen rhythm techniques.  
Prerequisite: 57-163.

57-171 Introduction to Music Technology (self-paced)  
Fall and Spring: 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 57-101. Material will be covered during weekly class sessions, though students are expected to make time in the evenings or weekends to work on their projects in either the MTC (MM119A) or some other cluster. Students with prior experience may pass out of certain classes and projects by providing teacher with equivalent work (pending teacher approval). In addition to the required projects, there is a final exam which is administered during the last class session.

57-173 Survey of Western Music History  
Fall: 9 units  
This course surveys the development and contexts of European art music and its global adaptation. While keeping in view the chronology from Gregorian chant to the present, this survey emphasizes key personalities and issues, particularly issues relating to period style and interpretive decisions in performance.  
Corequisite: 57-188.

57-180 Basic Solfege I  
Fall: 3 units  
This course improves the student’s ability to analyze music aurally and to sing at sight in traditional meters and tonalities using the “fixed do” system. Solfege is the integration of the three cognitive skills: reading music, hearing music, and writing what one hears. Section assignment is determined by a placement test given at the time of the audition or prior to the start of classes. It includes work on fundamentals for inexperienced students.

57-181 Solfege I  
Fall: 3 units  
This course improves the student’s ability to analyze music aurally and to sing at sight in traditional meters and tonalities using the “fixed do” system. Solfege is the integration of the three cognitive skills: reading music, hearing music, and writing what one hears. Section assignment is determined by a placement test given at the time of the audition or prior to the start of classes.

57-182 Solfege II  
Spring: 3 units  
Continues 57-181 Solfege I.  
Prerequisites: 57-180 or 57-181 or 57-185.

57-183 Solfege III  
Fall: 3 units  
Continues 57-182 Solfege II. Students are given assignments of classical music written in the treble, bass, soprano, alto, and tenor clefs. Writing consists of two-part contrapuntal dictations.  
Prerequisite: 57-182.

57-184 Solfege IV  
Spring: 3 units  
Continues 57-183 Solfege III. Students learn to read atonal music and practice three-part contrapuntal dictations as well as harmonic dictations.  
Prerequisite: 57-183.

57-185 Advanced Solfege I  
Fall: 3 units  
This course improves the student’s ability to analyze music aurally and to sing at sight in traditional meters and tonalities using the “fixed do” system. Solfege is the integration of the three cognitive skills: reading music, hearing music, and writing what one hears. Section assignment is determined by a placement test given at the time of the audition or prior to the start of classes. It includes advanced work for experienced students and those with perfect pitch.

57-186 Advanced Solfege II  
Spring: 3 units  
Continues 57-185 Advanced Solfege I.  
Prerequisite: 57-185.
57-188 Repertoire and Listening for Musicians
Fall: 1 unit
This course is the required co-requisite listening component for Survey of
Western Music History (57-173). In this course, students listen critically to
essential music which has stood the test of time and to superior performances. It features 2-3 hours of listening per week.
Corequisite: 57-173.

57-189 Introduction to Repertoire and Listening for Musicians
Fall: 3 units
One of the most important ways of achieving musical excellence is to
listen. In this course, students listen critically to essential music which has
stood the test of time and to superior performances. This on-line course features listening and discussion in a virtual coffee shop atmosphere. 2-3 hours of listening per week. Midterm and final listening tests. Proficiency requirement for freshman music majors.

57-190 Repertoire and Listening for Musicians I
Spring: 3 units
One of the most important ways of achieving musical excellence is to listen. In this course, students listen critically to essential music which has stood the test of time and to superior performances. This on-line course features listening and discussion in a virtual coffee shop atmosphere. 2-3 hours of listening per week. This semester introduces full scores for chamber and orchestral music. Midterm and final listening tests. This course contains midterm and final listening tests. Proficiency requirement for freshman music majors. Other students admitted with instructor's permission.

57-191 Keyboard Studies
Fall and Spring: 3 units
All undergraduate music students are required to take four semesters of keyboard studies during their freshman and sophomore years. The emphasis of this course is to develop a practical keyboard facility, which includes keyboard theory and technique, sightreading, solo and ensemble repertoire, transposition, and a variety of creative activities such as harmonization and improvisation.

57-193 Collaborative Piano Skills I
Fall: 3 units
A required course for first year piano majors. The skills include sightreading, basic keyboard harmony, transposition, and improvised accompaniments for popular or musical theater songs from either a piano reduction or a lead sheet. The students participate in collaborative situations such as juries, recitals, and class presentations. The presentations are critiqued by the instructor and by other students.

57-194 Collaborative Piano Skills II
Spring: 3 units
Continues 57-193 Skills of Accompanying I. Prerequisite: 57-193.

57-207 Secondary Studio
Fall
Provides the opportunity for students to pursue study in a secondary instrument or area. By special permission only.

57-208 Secondary Studio
Spring
Provides the opportunity for students to pursue study in a secondary instrument or area. By special permission only.

57-209 The Beatles
Intermittent: 9 units
This course will focus on the phenomenon of the Beatles. Their songs will be studied, with analysis of the musical and lyrical content and structural elements. What musical styles do the songs address? What were their musical influences? In what ways did their music change over the years? Also, the music's social context will be studied. Why were the Beatles so popular and influential? What exactly caused Beatlemania? How did the group form, grow, and end? The Beatles are the most famous rock group in history; their reasons for this are as much cultural as musical, and we'll study the two elements simultaneously. Open to all undergraduate students.

57-211 Movement and Dance III
Fall: 3 units
Improve overall health. With a focus on creativity and expression in movement, these courses concentrate on using the body as a tool in the creative process. Throughout "Movement and Dance I - IV", courses will include movement fundamentals, modern dance, ballet, partnering, dance composition/improvisation; as well as mini-courses in dance forms which can include stage combat, Flamenco dance, pilates and ballroom dance. Prerequisite: 57-211.

57-220 English Diction
Fall: 3 units
This one semester course helps singers sing English songs from the Classical and Musical Theater repertoire with clarity, accuracy, ease, uniformity, and expressiveness; to illuminate meaning; and to improve tonal quality through diction.

57-221 Italian Diction
Fall: 3 units
A study of the fundamentals of Italian diction and development of legato vocal style through the analysis of grammatical usage, word construction, vowel colorization, and consonant articulation. Included are in-class performance evaluations, listening assignments, critiques, and private coachings.

57-222 French Diction
Fall: 3 units
This course is designed primarily for singers specializing in French Art Songs of the 19th and 20th centuries. It deals with the use of the International Phonetic Alphabet, its application to singing in French, the use of the liaison and the preparation of the text of a song or aria. One-third of the course is theory and two-thirds of the course is spent on application by performance with piano accompaniment.

57-223 German Diction
Fall: 3 units
In-depth study of German diction - development of legato vocal style in German through the analysis of grammatical usage, word construction, vowel colorization and consonant articulation. Included are in-class German diction evaluations, peer assessment, and emphasis on competency in using the International Phonetic Alphabet.
57-227 Jazz Orchestra
Fall and Spring: 3 units
These are Jazz Ensembles (Section A and Section B) which incorporate a comprehensive approach to Big Band performance and study. The music performed is drawn from all eras of big band repertoire with occasional programs of specific composers and genres. The Jazz Ensembles are carefully coordinated with the Jazz Performance Minor program, the Jazz Vocal Ensemble, and other major ensembles in order to challenge and prepare students for professional music career opportunities. Both ensembles perform on the regular School of Music concert series (2-3 shows per semester) and for on-campus events. Trips to festivals and performances at local venues as part of jazz concert series also occur. The "final exam" for this course is a performance at a local jazz club. Admission of undergraduate and graduate students is by competitive audition and placement is by the director. Grading is based on attendance, preparation, and consistent progress.

57-228 Chamber Music
Fall: 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.

57-229 Chamber Music
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.

57-230 Baroque Ensemble
Fall and Spring: 3 units
Carnegie Mellon Baroque is a performing ensemble of 15-25 players consisting of winds, strings and keyboard. Students in this ensemble explore the orchestral and chamber music of the 18th Century. The Ensemble performs on modern instruments, incorporating performance practice ideals of the Baroque era. Throughout the rehearsal process, students are encouraged to study original source materials and arrive at historically informed and musically satisfying performances.

57-231 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. A performance is required each semester.

57-232 Chamber Music Guitar
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.

57-233 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.

57-234 Performance for Composers
Fall: 3 units
This course is for composition majors who choose to fulfill the performance elective requirement in the junior year by completing an independent performance project in the fall semester. Examples of projects can include producing a recital of his/her compositions, or pursuing other performing interests, such as writing music for a School of Drama production. Registration by composition faculty permission only.

57-236 Performance for Composers
Spring: 3 units
This course is for composition majors who choose to fulfill the performance elective requirement in the junior year by completing an independent performance project in the spring semester. Examples of projects can include producing a recital of his/her compositions, or pursuing other performing interests, such as writing music for a School of Drama production. Registration by composition faculty permission only. Prerequisite: 57-234.

57-240 Acting I
Fall: 6 units
The basics of acting will be established throughout the first year following the guideposts described in Audition, by Michael Shurtleff. Structured improvisations, monologues, scene work, songs, and arias will provide a platform for the development of stage presence and effective communication. Each semester will finish with a group project that provides an opportunity for the students to begin to work together as a cast.

57-241 Acting II
Spring: 6 units
Continues 57-240 Acting I. Prerequisite: 57-240.

57-257 Orchestration I
Fall: 6 units
This is an introductory course for all music majors and required for sophomore composition majors. The characteristics of each instrument of the orchestra are studied thoroughly. Orchestral textures from the classics to contemporary music are studied and analyzed. Prerequisites: 57-150 or 57-153 or 57-156.

57-258 20th-21st Century Techniques
Spring: 6 units
This course is open to all music majors and required for sophomore composition majors. The most important techniques from Debussy to the present will be reviewed in terms of melody, harmony, and form. Tonality, serialism, and aleatoric devices will be studied. Compositional techniques of the 20th Century are put into perspective and compared with other developments in the arts. The class is conducted as an open forum in which discussions are encouraged. Prerequisite: 57-151.

57-271 Orchestration II
Fall: 6 units
Students will analyze music from the Classical to Avant-Garde and use the knowledge acquired to orchestrate piano scores in the appropriate style. Style, practicality, color, and imagination are encouraged. This course is designed for junior composition majors. Other students may register with instructor permission after an interview. Prerequisite: 57-257.

57-273 Piano Pedagogy I
Fall: 6 units
This course offers an historical overview of piano pedagogy including its significant developments over the past forty years. Topics covered include beginning piano techniques, the sequencing of concepts and materials, common problems among beginning pianists, practicing, motivation, and parental involvement. Current representative beginning piano methods will be surveyed. Prerequisite: 57-273.

57-274 Piano Pedagogy II
Spring: 6 units
Beyond the beginning years: this course covers piano pedagogy of intermediate and early advanced level students. Topics include "What is a good piece?" Standard literature and technical development repertoire lists will be studied. The business of piano teaching and the instruction of college keyboard skills for non-piano majors will be discussed. Prerequisite: 57-273.

57-275 Piano Pedagogy III
Fall: 6 units
Continuation of 57-274. Intermediate literature, analysis, teaching, and performance will be covered. Topics include "What is style?" Prerequisite: 57-274.

57-276 Piano Pedagogy IV
Spring: 6 units
Continuation of 57-275. Early advanced literature, analysis, teaching, and performance will be covered. Prerequisite: 57-275.

57-283 Music History I
Fall: 9 units
This course will be a historic overview of each period of Western European art music and in-depth analysis of representative musical genres and forms. The first semester will begin with the birth of Opera and the Baroque era and continue through the early works of Beethoven. We will then analyze the genres/forms of the Middle Ages and Renaissance. Corequisite: 57-190.
57-284 Music History II
Spring: 9 units
This course will be a historic overview of each period of Western European art music and in-depth analysis of representative musical genres and forms. This second semester will begin with the middle period works of Beethoven and will continue chronologically through the major composers, styles, and forms of the 19th and 20th centuries.
Prerequisite: 57-283
Corequisite: 57-289.

57-285 Music History III
Spring: 9 units
Corequisite: 57-290.

57-289 Repertoire and Listening for Musicians II
Fall: 3 units
This is a continuation of the School of Music's four-semester listening curriculum. Students listen critically to essential music which has stood the test of time and to superior performances. This semester's repertoire includes units focusing on contrapuntal masterpieces from the Middle Ages through 20th Century, and further builds score-reading experience. This on-line course features listening and discussion in a virtual coffee shop atmosphere. 2-3 hours of listening per week. Midterm and final listening tests. Proficiency requirement for sophomore music majors. Other students admitted with instructor's permission. Repertoire and Listening for Musicians I and II are not prerequisites.

57-290 Repertoire and Listening for Musicians III
Spring: 3 units
This is the culmination of the School of Music's four-semester listening curriculum. Students listen critically to essential music which has stood the test of time and to superior performances. Highlights of this semester's repertoire include units on Middle and Late Beethoven as well as a decade-by-decade survey of the 20th Century. This on-line course features listening and discussion in a virtual coffee shop atmosphere. 2-3 hours of listening per week. Midterm and final listening tests. Proficiency requirement for sophomore music majors. Other students admitted with instructor's permission. Repertoire and Listening for Musicians I-III are not prerequisites.

57-293 Keyboard Studies Test (Degree)
Fall and Spring
This is the keyboard proficiency test which is a requirement for all undergraduate music majors who are not piano majors.

57-294 Beginning Piano Test
Fall and Spring
This is the keyboard proficiency test which is a requirement for all music performance, music composition, music technology, and music theory minors.

57-300 Advanced Bagpipe and Drum Band
Fall and Spring: 3 units
The Pipe Band at Carnegie Mellon is a competitive Grade 3 band in the Eastern United States Pipe Band Association. The band competes at various Scottish festivals and Highland Games during the school year. The band also performs at university activities throughout the year. These include Convocation, Homecoming, Spring Carnival, and Commencement. Other engagements include Spring Concert at CMU and the St. Patrick's Day Parade in Pittsburgh. The band has also played as an opening act for the Pittsburgh Steelers and a Rod Stewart concert.

57-301 Bagpipe History
Intermittent: 3 units
This course covers all types of bagpipe music, including Ceol Mor and Ceol Beag, and studies the prominent composers from MacCrimmon to the present day. Students compose their own material in all time signatures commonly used. The course covers Piobaireachd, Marches, Strathspye, Reels, Hornpipes, and Jigs, as well as harmony and the ability to write out tunes from repetitive listening.

57-302 Bagpipe Construction
Intermittent: 3 units
This course is an in-depth study of Piobaireachd construction, including Primary, Secondary, Tertiary Types A & B, Supplementary Types A & B, and Irregular. The course covers the different patterns in Light Music construction. Students also study the makeup of Pipe Band Medleys and repertoire for competition versus concert. Prerequisite: 57-307.

57-303 Bagpipe Literature and Repertoire
Intermittent: 3 units
This course will cover the origins of the bagpipe and Piobaireachd, bagpipe music in competition, military, and dance. We will also cover major piping competitions, famous bagpipe players, and piping today.

57-304 Bagpipe Maintenance
Intermittent: 3 units
All aspects of bagpipe maintenance are covered in this course, from basic hemping and tying in bags to reeds set-up and manipulation. The course includes study of all types of reeds, cane and synthetic, as well as drone and chanter, and recognition of pipemakers' patterns and distinctive hallmarks.

57-305 Bagpipe Reedmaking
Intermittent: 3 units
This is a hands-on course where the student learns how to make pipe chanter reeds by the traditional method of gouging, shaping, and tying up. This course follows 57-304, Bagpipe Maintenance. Further analysis of chanter and drone reeds will be covered also.
Prerequisite: 57-304.

57-306 World Music
Fall: 6 units
An exploration of the diversity and complexity of music from around the world. The class will have three sections: 1. Classical music from India, Iran, Indonesia, and Asia; 2. Native and folk music from Africa, Europe, Australia, and the Americas; 3. The influence of world music on Western classical music. This class will include some reading, listening to CDs, watching videos, and papers or presentations. If time permits, there will be special musical activities and invited guests.
Prerequisite: 57-283.

57-307 Bagpipe Theory
Intermittent: 3 units
This course prepares students for 57-302, Bagpipe Construction. All aspects of Bagpipe Theory are covered, including time signatures, grand staff, musical rudiments, musical terms and definitions, and writing of simple tunes from memory.

57-308 Bagpipe Advanced History
Intermittent: 3 units
This course is an in-depth study of the origins of the bagpipe, including the oral tradition, the Hereditary Pipers and their teachings, piping in the military, prominent teachers, and a study of the Tree of Piping dating from MacCrimmon to the present day.

57-310 Bagpipe Advanced Literature and Repertoire
Intermittent: 3 units
This course prepares students who have covered all other courses for the Graduate Exam from the Institute of Piping in Scotland. It covers all aspects of theory, history, and practical ability. An in-depth paper should also be prepared by the students in this course on a piping topic of their choice.

57-313 Topics in Movement and Dance
Fall: 1.5 units
This intermediate level mini-semester course furthers the dance foundation practiced in the first two years of the School of Music movement curriculum. This modern dance technique class will explore momentum based phrase material, body alignment and release, movement dynamics, inversions and floor work. This course focuses on the information and the tools needed to extend movement technique, skills, and performance quality.
Prerequisite: 57-212.

57-314 Topics in Movement and Dance
Fall: 1.5 units
This intermediate level mini-semester course furthers the dance foundation practiced in the first two years of the School of Music movement curriculum. This ballet technique class is designed to increase flexibility, strength, balance and articulation through the execution of classical ballet vocabulary and alignment to enhance strength and fluidity in performance.
Prerequisite: 57-212.

57-315 Topics in Movement and Dance
Spring: 3 units
This intermediate level course furthers the dance foundation practiced in the first two years of the School of Music movement curriculum. Classes will encourage an understanding of dance through the practice of creative improvisation and composition. The course is designed to develop the process of exploration and creation of movement and its performance applications.
Prerequisite: 57-212.
57-329 Beginning Piano for Minors
Fall and Spring: 3 units
This is a small group lesson for music performance, music composition, music technology, and music theory minors who cannot pass the required beginning piano test.

57-330 Beginning Piano for Minors
Spring: 3 units
This is a small group lesson for music performance, music composition, music technology, and music theory minors who cannot pass the required beginning piano test.

57-331 Principles of Education
Fall: 9 units
This course introduces students to the art and science of being an educator. Content includes views of the academic and social structure of the school, physiological & social characteristics of learners that influence instruction, widely recognized research on learning & teaching, and appropriate & effective class preparation and teaching strategies. Corequisite: 57-608.

57-332 Introduction to Conducting
Fall: 6 units
This course develops the basic skills needed to conduct instrumental ensembles or a small orchestra. It is primarily focused on conducting technique, body language and body coordination and communication. It also deals with learning and translating an instrumental or orchestral score into actual music. The goal is to achieve a clear and communicative technique upon which an artistic interpretation can be built. The student works periodically with a pianist or a small chamber ensemble.

57-333 Band and Choral Arranging
Spring: 6 units
This course presents basic techniques of arranging music for elementary and secondary school choral and instrumental ensembles. Instruments and voices are reviewed for best scoring properties and systematic aural & visual score analyses of repertoire are used to reveal various approaches to scoring ensemble sound. Prerequisite: 57-153.

57-334 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 Kiltie Band will be part of the course content.

57-336 Instrumental/Choral Conducting
Spring: 6 units
This course is a continuation of Introduction to Conducting. The course offers a more detailed conducting technique, adding those subjects related to choral conducting. This is followed by the study and the analysis of interpretation from the point of view of the conductor and ends stressing a set of important practical items, including the psychological attitude and the leadership a conductor must develop as well as the organization and achievement of a fruitful rehearsal technique. The students work periodically with a pianist, a soloist or a chamber ensemble on traditional works and on their own compositions in the case of composition majors. Prerequisite: 57-332.

57-337 Sound Recording
Fall and Spring: 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 ProTools 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.

57-338 Sound Editing and Mastering
Fall and Spring: 6 units
The raw recording is just 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. Class attendance is essential; work outside of class is necessary. Prerequisites: 57-337 or 57-341 or 57-357.

57-339 Acting III
Fall: 6 units
This course will build upon the foundation laid in the first year, with a more concentrated look at scene work, an audition workshop that focuses on cold readings as well as monologues, and a character-development project that works to identify specific issues that inhibit freedom on stage. More in-depth work on songs and arias will lead into a musical scene project. The semester will close with a classical text project in which the students will work with verse. Prerequisite: 57-241.

57-340 Acting IV
Spring: 6 units
Continues 57-339 Acting III. Prerequisite: 57-339.

57-343 Interdisciplinary Studies in Listening, Culture, and Technology
Intermittent: 9 units
The proliferation of portable as well as computerized audio technologies has radically changed the way the human beings listen, consume, and produce music and sound. With the emergence of "cloud" storage services like Dropbox, Amazon, and Google you can effortlessly store and share music files anonymously or with friends. Services like Facebook, Pandora, Spotify, Last.fm, Amazon, and iTunes use finely tuned algorithms to make musical recommendations and in the process further personalize your experience as a consumer of music. All of these services, many of which are virtual, have come to mediate our intensely personal and communal experiences with music. The Listening Spaces seminar seeks to understand the overwhelming impact these mediating technologies have had on our society. Political and personal interactions with music. Foundational readings will include Jonathan Sterne’s MP3: The History of a Format, Alexander Galloway’s Gaming: Essays on Algorithmic Culture, Trebor Scholz’s Digital Labor: The Internet as Playground and Factory. The seminar will be focused around developing and completing critical projects that cross technological and humanistic boundaries.

57-347 Electronic and Computer Music
Fall: 6 units
This course builds on the concepts learned in Introduction to Music Technology (57-101) and gives added knowledge in the areas of composition using digital and analog devices as well as various computer programs. Building computer models of both analog and digital synthesizers as well as drum machines, loop players and various other sound processing effects will be covered in detail. Students will be required to produce several projects throughout the course demonstrating their understanding of various concepts in electronic music. More emphasis is placed on the overall quality of the end musical product than in 57-101 in order to prepare students for music production in a professional setting. Prerequisites: 57-101 or 57-171.

57-349 Supervised Theory Teaching
Fall and Spring: 6 units
This course provides teaching skills in theory for students who have already completed the theory program at Carnegie Mellon University or who have demonstrated theory competence. The students will attend all sessions of the assigned theory class and will assist the professor by correcting homework, delivering a short lecture, developing a class syllabus and tutoring individual students. The work is done under direct supervision and advice from the regular professor who is always present in the class. Enrollment limited to a maximum of two students per class.
57-350 Dalcroze Piano Improvisation
Fall and Spring
These courses are required for candidates in the Dalcroze Certification program. They are designed to develop keyboard improvisation skills necessary for teaching Eurhythmics.
Prerequisite: 57-350.

57-351 Dalcroze Piano Improvisation
Fall and Spring
These courses are required for candidates in the Dalcroze Certification program. They are designed to develop keyboard improvisation skills necessary for teaching Eurhythmics.
Prerequisite: 57-350.

57-352 Dalcroze Piano Improvisation
Fall and Spring
These courses are required for candidates in the Dalcroze Certification program. They are designed to develop keyboard improvisation skills necessary for teaching Eurhythmics.
Prerequisite: 57-351.

57-353 Dalcroze Piano Improvisation
Fall and Spring
These courses are required for candidates in the Dalcroze Certification program. They are designed to develop keyboard improvisation skills necessary for teaching Eurhythmics.
Prerequisite: 57-352.

57-355 Secondary Guided Teaching
Spring: 3 units
This course enables students to apply instructional strategies in local secondary school music classes. School visits provide opportunities to work with band, choral, & orchestral ensembles and general music classes. Seminar discussions with the cooperating teachers familiarize students with both school-wide and classroom management issues that affect teaching, learning, motivation, and the administration of music programs.
Prerequisites: 57-332 and 57-336 and 57-356 and 57-360 and 57-361 and 57-362 and 57-363 and 57-375 and 57-607 and 57-608
Corequisite: 57-376.

57-356 Elementary Guided Teaching
Fall: 3 units
This is the second level of field experience in the public schools. This course provides for observation and closely supervised teaching experiences with elementary age children in a school setting.
Corequisite: 57-375.

57-359 Career Strategies for Musicians
Intermittent: 3 units
This course will assist students in developing the necessary expertise and materials to transition successfully from music student to professional musician. Four major areas will be covered: 1) The multifaceted activities of today’s professional musicians, individual assessments to determine strengths and challenges related to these activities, and strategies for addressing challenging areas; 2) Developing promotional materials for entrepreneurial and salaried opportunities. Entrepreneurial materials include business cards, letterhead, photo, bio, performance resume, email list, press release, flyers, grant proposals, demo CD and website. Salaried materials include an employment resume and cover letter; 3) Self-employment considerations, including budgeting, taxes, health insurance, and unions; and, 4) Communications, including handling auditions, introducing pieces, introducing group members, and pitching ideas. You have the talent, determination, and work ethic to succeed. Now learn the marketing, business and communications skills to close the gap.

57-360 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.

57-361 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 will learn about purchasing proper equipment for the various levels of learning in common school programs.

57-362 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.

57-363 String Methods
Spring: 3 units
String Methods prepares 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.

57-364 Conducting Practicum
Fall and Spring: 3 units
This course provides applied conducting experience for the conducting minor.

57-370 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 experience 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.

57-374 Music in the Urban School
Fall and Spring: 9 units
This course will involve workshops with nationally known instructors in eurhythmics, 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.
Prerequisite: 57-331
Corequisite: 57-356.

57-375 Music in the Elementary School
Fall: 6 units
This course is designed to provide a philosophical background for teaching music in the elementary school and to provide a variety of pedagogical techniques, which are essential when teaching music from Preschool through Grade 6.
Prerequisite: 57-331
Corequisite: 57-356.

57-376 Music in the Secondary School
Spring: 6 units
This course covers a variety of topics related to the development and the management music programs in secondary schools. Emphasis is placed on the leadership, classroom management, general music & performance course content, and routine administrative planning.
Prerequisite: 57-331
Corequisite: 57-355.
57-377 Psychology of Music
Intermittent: 9 units
Music cognition is an interdisciplinary approach to understanding the mental processes that support musical behaviors, including perception, comprehension, memory, attention, and performance. Like language, music is a uniquely human capacity that arguably played a central role in the origins of human cognition. This course is survey of current approaches to theories about the perception and cognition of music. Topics covered include psychoacoustics, the cognitive neuroscience of music: relationships between music and language; the nature of musical knowledge; and debates about aesthetics, evolutionary psychology, and musical universals. At the end of this course a student should be able to identify key theories and hypotheses in music cognition as they relate to memory, emotion, physiology, neurology, acoustics, language, and evolution. They will be able to comparatively evaluate hypotheses and place them in an intellectual context. These objectives will be achieved through critical readings, discussions, and written exercises. There are no prerequisites for this course. It will be helpful for you to know some basic elements of music theory (such as the names for chords, Roman numerals, and so on), but some extra help will be available to cover these topics. Some notational basics will be covered in the first lecture.

57-381 Collaborative Piano I
Fall and Spring
This is the first in a series of hands-on courses which allow the student to accumulate experience accompanying 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 jury.

57-382 Collaborative Piano II
Fall and Spring
Continues 57-381 Accompanying I. Prerequisite: 57-381.

57-383 Collaborative Piano III
Fall and Spring
Continues 57-382 Accompanying II. Prerequisite: 57-382.

57-384 Collaborative Piano IV
Fall and Spring
Continues 57-383 Accompanying III. Prerequisite: 57-383.

57-385 Collaborative Piano V
Fall and Spring
Continues 57-384 Accompanying IV. Prerequisite: 57-384.

57-386 Collaborative Piano VI
Fall and Spring
Continues 57-385 Accompanying V. Prerequisite: 57-385.

57-391 Keyboard Studies (Music Ed)
Fall and Spring: 3 units
This course develops piano skills necessary for work in the elementary and secondary schools. Special emphasis is placed on transposition, score reading, harmonization and sight-reading. This course is required for all music education majors. Prerequisite: 57-191.

57-392 Keyboard Studies (Music Ed)
Fall and Spring: 3 units
Continues 57-391 Keyboard Studies V. This course is required for all music education majors. Prerequisite: 57-391.

57-393 Keyboard Studies Test (Music Ed)
Fall and Spring
This is the keyboard proficiency test which is a requirement for all undergraduate music majors who are music education minors.

57-399 Music-Cinema-Culture
Intermittent: 9 units
The first 100 years of the 20th Century's only original art form, whose advent has brought about tremendous social and cultural changes. Students view selected films, learning first the basics of film theory, cinema's working structures and the function of music. Ultimately, the student will learn to analyze, in the form of a written essay, the function and value of the music in a particular film and the impact such music has had on society.

57-408 Form and Analysis
Spring: 6 units
This course provides a working understanding of all styles and genres of Western classical and contemporary repertoire. Students will explore various aspects of the compositional process, from basic organizational structures to the details of individual musical phrases. They will learn to see and to hear the most important compositional features of a piece of music and will develop a deeper understanding of the music they perform, conduct, and compose. Prerequisite: 57-151.

57-412 Opera Since Wagner
Intermittent: 9 units
In the 400-year arc of opera history, the last 125 years have seen the genre's apotheosis, perigee, and current renaissance. Between the Wagnermania of the late nineteenth century and today's vogue for both opera and "opera," new opera production slowed greatly in the third quarter of the last century as composers rejected its traditions and audiences turned 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 traditions? In what musical styles has opera flourished and languished? How have audiences changed? How has the notion of opera itself changed, from the nature of its heroes and heroines to its 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 analytical tools 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). Prerequisite: 57-284.

57-413 The Interpretation of Music
Intermittent: 6 units
What does it mean to "interpret" music? How does performance differ from interpretation? How do we distinguish a good interpretation from a bad one? To answer these questions, this course examines Metaphor, History, Influence, Meaning, Analysis, Performance, Musicology, and other concepts, applying them to works like the Mendelssohn Violin Concerto, Mozart's Don Giovanni, Beethoven's Ninth Symphony, Schoenberg's Gurre Lieder, and John Cage's Imaginary Landscape No. 4. Our readings draw mainly from Lawrence Kramer's Interpreting Music (2011). Our goal is to appreciate the complexity and nuance inherent in the process of music making and to formulate our individual values in the interpretation of music.

57-414 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 biomusicology), 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. Repertory will include Vivaldi's "Spring" Concerto, Beethoven's "Pastoral" Symphony, Wagner's Ring of the Nibelung, Mahler's Symphony No. 3, and Debussy's La Mer. We will compare landscapes by Sibelius and Copland, birds by Dvorak, Bartok, Ravel, Stravinsky, and Messiaen, and whales by Crumb and Hovhaness. We will also treat statements on the environmental crisis by composers Harrison Birtwistle, John Adams and John Luther Adams. Required text: Mervyn Cook, ed. The Cambridge Companion to Twentieth-century Opera (2005). Prerequisite: 57-284.
57-415 Mozart Operas
Fall: 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, 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.
Prerequisite: 57-285.

57-417 Major Vocal Performance Ensemble
Fall and Spring: 6 units
There are two choral ensembles. Concert Choir is a select ensemble of approximately 40 voices of superior vocal/musical talent and experience in the choral idiom. Performance requirements are more stringent than those of the Repertory Chorus. Repertory Chorus is an ensemble of undetermined size. Emphasis is placed on vocal technique and development, musical skills in the rehearsal with minimum performance requirements. Audition required.
Corequisites: 57-500 or 57-501 or 57-502 or 57-509 or 57-521 or 57-522.

57-418 Major Instrumental Ensemble
Fall and Spring: 6 units
There are two instrumental ensembles: 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.
Corequisites: 57-501 or 57-502 or 57-503 or 57-505 or 57-506 or 57-507 or 57-508 or 57-509 or 57-510 or 57-511 or 57-512 or 57-513 or 57-514 or 57-516 or 57-517 or 57-519 or 57-520 or 57-521 or 57-522.

57-420 Jazz Vocal Ensemble
Fall and Spring: 3 units
A highly selective group of mixed voices who perform contemporary jazz and pop vocal arrangements. Open to all CMU students. Audition required.
Prerequisite: 57-420.

57-423 Repertoire Orchestra
Fall and Spring: 3 units
This course thoroughly acquaints participants with the standard works of the choral idiom. Performance requirements are more stringent than those of the Repertory Chorus. Repertory Chorus is an ensemble of undetermined size. Emphasis is placed on vocal technique and development, musical skills in the rehearsal with minimum performance requirements. Audition required.
Corequisites: 57-500 or 57-501 or 57-502 or 57-509 or 57-521 or 57-522.

57-424 Percussion Ensemble
Fall and Spring: 3 units
This ensemble is open to all percussion majors.

57-428 Theatre Orchestra
Intermittent
Instrumental ensemble which accompanies vocal productions in the School of Music or the School of Drama.

57-429 Beginning Piano for Children
Fall and Spring: 6 units
This course is the first of two courses in 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.
Prerequisite: 57-273.

57-430 Music of Iran
Intermittent: 9 units
The Iranian 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 Dástgâh. Starting with a historical survey of the ancient and medieval Persian music, different aspects of the Dâstgâh 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.

57-431 Italian Literature and Repertoire
Spring: 3 units
The course provides a bibliography of repertoire in the Italian language. Material will include art songs and cantatas and will be presented via individual student performances in class, listening to recordings and group survey of repertoire. Reading and writing assignments will serve to establish historical perspective as well as programming considerations.

57-432 French Literature and Repertoire
Spring: 3 units
This course examines French songs for solo voice. Representative works from 18th through 20th centuries will be studied in the context of music history, style and programmatic considerations. Classes consist of individual performance, listening to recordings, and group survey of repertoire. Reading and written assignments establish historical perspective as well as programming considerations.

57-433 Musical Theatre Literature and Repertoire
Fall: 3 units
This class covers music theatre repertoire for two semesters, beginning chronologically with the operetta and concluding with current theatre composers. Each student will be assigned songs to prepare from these musicals. These songs can also be used for music theatre auditions. Students are expected to research all assigned songs and perform them in the proper style. Notebooks must be kept which include all lecture notes, class song assignments and music for songs performed individually.

57-434 Musical Theatre Literature and Repertoire
Spring: 3 units
Continues 57-433 Musical Theatre Literature and Repertoire.
Prerequisite: 57-433.

57-435 German Literature and Repertoire
Spring: 3 units
The course examines German repertoire composed for solo voice. Representative works from the Baroque period through the 20th Century are studied in the context of musical style, vocal demands and programmatic considerations. Repertoire focuses on art songs and cantatas, but also includes certain oratorio excerpts, which are included frequently in recital programs. A bibliography of German repertoire is compiled through individual or group performance of songs, listening to recordings and through research assignments, the latter of which focuses upon the works of specific composers. Reading assignments are included to establish an historical perspective.

57-436 English/Contemporary Literature and Repertoire
Spring: 3 units
This course provides a bibliography of repertoire in the English language. Material will be limited to art songs and will be presented via individual student or group performances in class, and recorded performances. Research assignments will be required for selected anthologies or for works by specific composers. Repertoire will be examined according to vocal requirements, musical style, and programmatic function. The repertoire will consist primarily of works by British and American composers, but works by Russian and Spanish composers will also be included.

57-437 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.

57-438 Multitrack Recording
Fall and Spring: 9 units
This course builds upon the ideas learned in Sound Recording (57-337), 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.
Prerequisites: 57-337 or 57-341 or 57-357.
57-441 Analysis of 19th Century Music
Intermittent: 9 units
This course will provide students with a variety of tools for the analysis of music from Schubert to Mahler and early Schoenberg. The primary emphases will be on small-scale (chord-to-chord) harmonic organization, on the larger-scale organization of tonal centers, and on form, but other issues will also be explored (e.g. rhythm and meter, text/music relations). The course will sample a wide range of repertoires, including solo piano music, orchestral music, and opera, and it will have a special emphasis on chamber music including the German Lieb.
Prerequisite: 57-408.

57-442 Analytical Techniques
Fall: 9 units
Analytical Techniques is an upper level music support course for juniors and seniors who have completed the undergraduate required music theory curriculum in harmony and counterpoint. Studying the principles of Piston, Forte, Schenker and other important music theorists, students will learn to use whatever analytical techniques are best suited to better understand each individual piece. The primary goal of the course is to develop independent skills in analyzing their own repertoire as performers, conductors, composers, and teachers.
Prerequisite: 57-408.

57-444 Principles of Counterpoint
Intermittent: 9 units
This course explores the development of Western music composed with multiple independent parts. The first half of the course traces the history of part-writing from medieval organum to the twenty-first century. Emphasis is given to study of pre-Baroque and twentieth-century music, and to the conceptual shifts that occurred moving in and out of the common-practice period. The second half of the course examines, across multiple musical styles, specific contrapuntal techniques such as imitation and ground bass forms. Assignments include both writing exercises and analysis, culminating in a term project on a topic selected by the student.
Prerequisite: 57-151.

57-445 Counterpoint in 18th Century Composition
Intermittent: 6 units
In this course the student will study how to write two-part counterpoint within the harmonic framework of 18th-century instrumental music. The focus of study will be J.S. Bach's inventions, and writing will be directed towards composing several complete inventions in that style. Prerequisites: Harmony I and Harmony II or permission of the instructor. This course is designed for composers, theory minors, Bach lovers, keyboard majors, and anyone who wants to seriously sharpen their tonal writing skills.
Prerequisite: 57-153.

57-446 Renaissance Counterpoint
Intermittent: 6 units
In this course the student will study how to write vocal counterpoint using the classic "species" approach, based on the style of Renaissance masters Palestrina, Lassus, and Victoria. The latter part of the course will extend the study of instrumental music of the 16th century, and explore the development of chromaticism in avant-garde composers of the time. Reading about and listening to Renaissance music and composers will be included as background context for the theory work. Daily writing exercises in the first half of the course will lead to a term assignment focusing on producing a performable piece of music by the end of the semester. This course is designed for composers (both for writing technique and college teaching preparation), theory minors, early music lovers, choral singers and conductors, church musicians, and anyone who wants to sharpen their writing skills. Prerequisite: Harmony I or permission of the instructor (demonstrated competence in reading treble and bass clef, and intervals).
Prerequisite: 57-153.

57-448 Brass Pedagogy
Fall: 3 units

57-449 Beginning Piano for Children
Fall and Spring: 6 units
This course is the second of two courses in 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.
Prerequisite: 57-429.

57-454 Stagecraft I: beyond the performance
Intermittent: 3 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.

57-455 Shaping Time in Performance
Intermittent: 9 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 many aspects of performing as well as the many 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 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.

57-456 Communication and Marketing
Intermittent: 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 on the keyboard.
Prerequisites: 57-153 or 57-156 or 57-408.

57-463 Eurhythmics for Non-Majors
Fall: 6 units
Rhythm is about time and timing. Dalcroze Eurhythmics 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. This class is for juniors and seniors only.

57-464 Eurhythmics Applications for Non-Majors
Fall: 6 units
Rhythm is about time and timing. Dalcroze Eurhythmics 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. This class is for juniors and seniors only.
57-465 Eurhythmics Applications for Performing and Teaching
Fall: 6 units
Rhythm is about time and timing. Dalcroze Eurhythmics 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 rhythm movement reinforces understanding 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.
Prerequisite: 57-164.

57-466 Eurhythmics Applications for Performing and Teaching
Fall: 6 units
Rhythm is about time and timing. Dalcroze Eurhythmics 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 rhythm movement reinforces understanding 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.
Prerequisite: 57-164.

57-469 Production: Scenes
Fall: 6 units
Preparation of operatic and musical theatre scenes with a public performance of the scenes at the end of the semester. Specific repertoire based upon the proficiency of the individual student.
Prerequisites: 57-212 and 57-340.

57-470 Production: Scenes
Spring: 6 units
Preparation of operatic and musical theatre scenes with a public performance of the scenes at the end of the semester. Specific repertoire based upon the proficiency of the individual student.
Prerequisites: 57-212 and 57-340.

57-471 Production: Performance
Fall: 6 units
Preparation of an operatic or musical theatre production with a fully staged public performance of the production at the end of the class.
Prerequisites: 57-212 and 57-340.

57-472 Production: Performance
Spring: 6 units
Preparation of an operatic or musical theatre production with a fully staged public performance of the production at the end of the class.
Prerequisites: 57-212 and 57-340.

57-477 Music of the Spirit
Intermittent: 6 units
This is a guided listening course which surveys musical explorations of spirituality. While the majority of repertoire will be from the Western Classical tradition, musics of a variety of cultures will be included. The music will be organized by particular religious traditions and by universal themes, such as community, death/afterlife, birth/new birth, martyrs/heroes, transcendence/immanence, meditation/contemplation/trance, etc. Most course materials, including streaming audio, are online, with one meeting per week in the classroom. Will include participatory introductions to numerous forms of chant. Requires oral and written reports.

57-478 Survey of Historical Recording
Intermittent: 6 units
Through an intensive listening regimen, illustrated virtual lectures, discussion, and projects, this online course introduces major performing artists and highlights major developments in music media. The emphasis is on classical recordings. But there will also be excursions into influential and iconic popular artists.

57-480 History of Black American Music
Fall: 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. No prerequisites required. Open to upper level undergraduate students.

57-487 Advanced Solfege III
Fall: 3 units
Covers the same concepts as Solfege IV in more challenging material, from Bach chorales in open score to excerpts by Bartok, Honegger, Stockhausen, or Boulez. Dictations are three-part contrapuntal and difficult harmonic three and four parts.
Prerequisite: 57-186.

57-488 Advanced Solfege IV
Spring: 3 units
Continues 57-487 Advanced Solfege III. Prerequisite: 57-487.

57-496 Minor Studio
Fall and Spring
A 45-minute private lesson per week for all music performance minors. There is a fee for the lessons.

57-497 Minor Studio
Fall and Spring
A 45-minute private lesson per week for all music performance minors. There is a fee for the lessons.

57-498 Minor Studio
Fall and Spring
A 45-minute private lesson per week for all music performance minors. There is a fee for the lessons.

57-500 Major Studio (Voice)
Fall and Spring: 9 units
A one hour private lesson per week for all music majors.

57-501 Major Studio (Piano)
Fall and Spring: 9 units
A one hour private lesson per week for all music majors.

57-502 Major Studio (Organ)
Fall and Spring: 9 units
A one hour private lesson per week for all music majors.

57-503 Major Studio (Harp)
Fall and Spring: 9 units
A one hour private lesson per week for all music majors.

57-504 Major Studio (Violin)
Fall and Spring: 9 units
A one hour private lesson per week for all music majors.

57-505 Major Studio (Double Bass)
Fall and Spring: 9 units
A one hour private lesson per week for all music majors.

57-506 Major Studio (Viola)
Fall and Spring: 9 units
A one hour private lesson per week for all music majors.

57-507 Major Studio (Cello)
Fall and Spring: 9 units
A one hour private lesson per week for all music majors.

57-508 Major Studio (Guitar)
Fall and Spring: 9 units
A one hour private lesson per week for all music majors.

57-509 Major Studio (Flute)
Fall and Spring: 9 units
A one hour private lesson per week for all music majors.

57-510 Major Studio (Clarinet)
Fall and Spring: 9 units
A one hour private lesson per week for all music majors.

57-511 Major Studio (Oboe)
Fall and Spring: 9 units
A one hour private lesson per week for all music majors.

57-512 Major Studio (Clarinet)
Fall and Spring: 9 units
A one hour private lesson per week for all music majors.
57-513 Major Studio (Bassoon)  
Fall and Spring: 9 units  
A one hour private lesson per week for all music majors.

57-514 Major Studio ( Saxophone)  
Fall and Spring: 9 units  
A one hour private lesson per week for all music majors.

57-515 Major Studio ( Horn)  
Fall and Spring: 9 units  
A one hour private lesson per week for all music majors.

57-516 Major Studio ( Trumpet)  
Fall and Spring: 9 units  
A one hour private lesson per week for all music majors.

57-517 Major Studio ( Trombone)  
Fall and Spring: 9 units  
A one hour private lesson per week for all music majors.

57-518 Major Studio ( Euphonium/Baritone)  
Fall and Spring: 9 units  
A one hour private lesson per week for all music majors.

57-519 Major Studio ( Tuba)  
Fall and Spring: 9 units  
A one hour private lesson per week for all music majors.

57-520 Major Studio ( Percussion)  
Fall and Spring: 9 units  
A one hour private lesson per week for all music majors.

57-521 Major Studio ( Composition)  
Fall and Spring: 9 units  
A one hour private lesson per week for all music majors.

57-522 Major Studio ( Bagpipe)  
Fall and Spring: 9 units  
A one hour private lesson per week for all music majors.

57-570 Music and Technology Seminar  
1 unit

57-597 Senior Project  
Fall and Spring  
A composition for orchestra required of all senior composition majors.

57-598 Junior Recital  
Fall and Spring  
A half recital required of all junior performance majors.

57-599 Senior Recital  
Fall and Spring  
A full recital required of all senior performance majors.

57-603 Practice Teaching ( Elementary)  
Fall and Spring  
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. Students may choose a vocal  
or instrumental emphasis in the secondary placement.  
Prerequisites: 57-355 and 57-393.

57-604 Practice Teaching (Secondary)  
Fall and Spring  
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.  
Prerequisites: 57-355 and 57-393.

57-607 Vocal Methods  
Spring: 3 units  
This course enables each student to develop a pleasant, healthy, and  
musically expressive voice and to develop effective vocal pedagogy.

57-608 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.  
Prerequisites: 57-331.

57-610 Internship  
Fall and Spring  
A student can receive credit for an unpaid internship in a music related field.  
The amount of credit is determined by the number of internship hours.

57-611 Independent Study in History  
Fall and Spring  
Students undertake a critical examination of some aspects of music on an  
independent basis under the supervision of a full-time faculty member. They  
choose their topic and contract with the Project Director (faculty sponsor) as  
to when and how the project will be completed. Open to upperclassmen.

57-612 Independent Study in Theory  
Fall and Spring  
Students undertake a critical examination of some aspects of music on an  
independent basis under the supervision of a full-time faculty member. They  
choose their topic and contract with the Project Director (faculty sponsor) as  
to when and how the project will be completed. Open to upperclassmen.

57-613 Independent Study in Research  
Fall and Spring  
Students undertake a critical examination of some aspects of music on an  
independent basis under the supervision of a full-time faculty member. They  
choose their topic and contract with the Project Director (faculty sponsor) as  
to when and how the project will be completed. Open to upperclassmen.

57-614 Independent Study in Performance  
Fall and Spring  
Students undertake a critical examination of some aspects of music on an  
independent basis under the supervision of a full-time faculty member. They  
choose their topic and contract with the Project Director (faculty sponsor) as  
to when and how the project will be completed. Open to upperclassmen.

57-615 Independent Study in Electronic and Computer Music  
Fall and Spring  
Students undertake a critical examination of some aspects of music on an  
independent basis under the supervision of a full-time faculty member. They  
choose their topic and contract with the Project Director (faculty sponsor) as  
to when and how the project will be completed. Open to upperclassmen.

57-616 Independent Study in Literature and Repertoire  
Fall and Spring  
Students undertake a critical examination of some aspects of music on an  
independent basis under the supervision of a full-time faculty member. They  
choose their topic and contract with the Project Director (faculty sponsor) as  
to when and how the project will be completed. Open to upperclassmen.

57-617 Independent Study in Sound Recording  
Fall and Spring  
Students undertake a critical examination of some aspects of music on an  
independent basis under the supervision of a full-time faculty member. They  
choose their topic and contract with the Project Director (faculty sponsor) as  
to when and how the project will be completed. Open to upperclassmen.

57-618 Independent Study in Conducting  
Fall and Spring  
Students undertake a critical examination of some aspects of music on an  
independent basis under the supervision of a full-time faculty member. They  
choose their topic and contract with the Project Director (faculty sponsor) as  
to when and how the project will be completed. Open to upperclassmen.

57-619 Independent Study in Opera  
Fall and Spring  
Students undertake a critical examination of some aspects of music on an  
independent basis under the supervision of a full-time faculty member. They  
choose their topic and contract with the Project Director (faculty sponsor) as  
to when and how the project will be completed. Open to upperclassmen.
57-620 Independent Study in Solfege
Fall and Spring
Students undertake a critical examination of some aspects of music on an independent basis under the supervision of a full-time faculty member. They choose their topic and contract with the Project Director (faculty sponsor) as to when and how the project will be completed. Open to upperclassmen.

57-621 Independent Study in Eurhythmics
Fall and Spring
Students undertake a critical examination of some aspects of music on an independent basis under the supervision of a full-time faculty member. They choose their topic and contract with the Project Director (faculty sponsor) as to when and how the project will be completed. Open to upperclassmen.

57-622 Independent Study for Competitions
Fall and Spring: 3 units
Students undertake a critical examination of some aspects of music on an independent basis under the supervision of a full-time faculty member. They choose their topic and contract with the Project Director (faculty sponsor) as to when and how the project will be completed. Open to upperclassmen.

57-623 Independent Study in Diction
Fall and Spring
Students undertake a critical examination of some aspects of music on an independent basis under the supervision of a full-time faculty member. They choose their topic and contract with the Project Director (faculty sponsor) as to when and how the project will be completed. Open to upperclassmen.

57-624 Independent Study in Theater Composition
Fall and Spring
Students undertake a critical examination of some aspects of music on an independent basis under the supervision of a full-time faculty member. They choose their topic and contract with the Project Director (faculty sponsor) as to when and how the project will be completed. Open to upperclassmen.

57-641 Dalcroze Research Paper
Fall: 3 units
Candidates in the Dalcroze Certification Program are required to submit a research paper based on their understanding of Dalcroze principles based on their experience and supported by appropriate literature.

57-642 Dalcroze Research Paper
Spring: 3 units
Candidates in the Dalcroze Certification Program are required to submit a research paper based on their understanding of Dalcroze principles based on their experience and supported by appropriate literature.

57-691 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 Eurhythmics, 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.

57-692 Dalcroze Pedagogy/Practice Teaching
Spring
This second semester of a two semester course focuses on applications of Dalcroze pedagogy and practice teaching with upper elementary and middle school age students.