

counting techniques, binomial, Poisson, and normal distributions. Prerequisites: MATH/CS 205 and MATH 172, 271 and 303 are recommended. Offered on demand.

317 Algebraic Structures (3)

Introduces algebraic structures in modern algebra with particular emphasis on groups and their properties. This course satisfies the oral competency requirement for mathematics majors. Prerequisites: CS/MATH 205 and 307. Offered spring of even-numbered years.

323 Real Analysis (3)

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A theoretical treatment of sets, relations, functions, numbers, inequalities, sequences, series, limits, and the derivative. Prerequisites: MATH 205 and one 300-level math course other than MATH 300. Offered spring of odd-numbered years.

340 Modern Geometries (3)

Explores Euclidean and non-Euclidean geometries with an emphasis on the analytic method. The cultural impact of non-Euclidean geometries is discussed. Topics include complex numbers, geometric transformations, plane geometries, including non-Euclidean geometries, the projective plane, quaternions, Hilbert's axioms. Prerequisites: MATH 205, 307 or consent. Offered fall of odd-numbered years.

350 Numerical Methods (3)

Examines efficient methods used in solving numerical problems with the aid of a computer. Topics include floating point arithmetic, interpolation and approximation, integration, roots of nonlinear equations, ordinary differential equations, and systems of linear equations. Prerequisites: MATH 172 and CS 207. MATH 307 is recommended. Identical to CS 350. Offered on demand.

480 Advanced Seminar (3)

Enables students to explore areas of advanced mathematics which are otherwise not included in the curriculum. The specific content varies each year and is individually tailored to the interests of the students enrolled. Prerequisite: consent. Offered on demand.

489 Research in Mathematics (3)

Provides students with the opportunity to conduct original research in an area of interest. Students work closely with one or more members of the faculty to develop and conduct a research project. Students present their findings orally during the semester's undergraduate research symposium and as a formal research paper and are encouraged to present their findings at a conference. Prerequisites: junior/senior status, major in mathematics, prior approval by the project adviser, and consent. May be repeated once for a total of six semester hours. Identical to BIO 489, CHEM 489, and EES 489. Offered each semester.

MUSIC

Ms. SANDRA BILLY, Director, Center for Sacred Music
 DR. R. DAVID CLAYTON
 MR. SAM DORSEY, Applied Music, Guitar (adjunct)
 Ms. LEE JORDAN-ANDERS, Program Coordinator
 MR. GEORGE STONE, Staff Accompanist, Piano (adjunct)
 Ms. BILLYE BROWN YOUMANS, Applied Music,
 Voice (adjunct)

Music is a unique expressive language, a special way of knowing as essential to basic education as the mastery of verbal and numerical skills. The study of this language provides individuals with personal fulfillment, enhances and complements everyday life, and creates a window through which the viewer can discover and experience aesthetic beauty. The music department at Virginia Wesleyan provides a program of study that educates its learners in a way that enables them to appreciate as well as critically articulate their responses to this important part of our culture. Virginia Wesleyan offers majors in applied music, music in the liberal arts, music concentration within the humanities division, and endorsement in vocal music education (K-12) for those who wish to teach. The department also offers courses for the non-musician, the "Familiar Faces" concert series, and a non-credit certificate program through the Center for Sacred Music, which includes an annual summer conference. The curriculum can help prepare students for careers in private teaching, public school teaching, church music, music merchandising, arts management, music librarianship, or graduate studies in music or humanities.

Major Requirements: Music with Applied Music track

COURSE NUMBER AND TITLE	SEM. HRS.
MUS 225 Intermediate Musicianship I	4
MUS 226 Intermediate Musicianship II	4
MUS 325 Advanced Musicianship I	4
MUS 326 Advanced Musicianship II	4
MUS 313 Music History I	3
MUS 314 Music History II	3
MUS 480 Senior Project	3
APMU 300 Chamber Music	2

See continuation of choices next page

Chart continued from previous page

APMU 133-494 Applied Music Study (six hours must be at the 300 level or above)	10
One of the following: MUS 100 Introduction to Listening MUS 200 Survey of Music MUS/ARTH 201 Introduction to Music & Art in the Western World MUS 310 Topics in Sacred Music HUM 301 Aesthetic Communication: Understanding and Experiencing the Arts	3
Other major requirements: Piano proficiency Ensemble participation each semester in residence	
TOTAL	40
ADDITIONAL COURSES NEEDED FOR ENDORSEMENT IN EDUCATION	
APMU 131-392 Applied Music Study in a Secondary Area	6
MUS 321 Conducting Techniques	3
MUS 354 Vocal Music Methods & Materials, K-12	3
EDUC 375 Content Teaching Methods	3
ALL OTHER REQUIREMENTS: SEE EDUCATION DEPARTMENT	

**Major Requirements:
Music in the Liberal Arts track**

COURSE NUMBER AND TITLE	SEM. HRS.
MUS 100 Introduction to Music MUS/ARTH 201 Introduction to Music and Art in the Western World	3
MUS 101 Basic Musicianship	3
MUS 225/226 Intermediate Musicianship I & II	8
APMU Applied music, two semesters private study on any instrument	4

Six courses at the 300-level from the following: MUS 202/302 Great Composers MUS 250/350 Music from the Baroque Era (1600 to 1750) MUS 251/351 Music in the Classic Period (1750 to 1825) MUS 252/352 19th-Century Music MUS 253/353 20th-Century Music MUS 310 Sacred Music History MUS 313/314 Music History I & II	18
MUS 480 Senior Project	3
TOTAL	39

Minor Requirements

COURSE NUMBER AND TITLE (See p. 32 for general minor requirements)	SEM. HRS.
MUS 225 Intermediate Musicianship I	4
MUS 226 Intermediate Musicianship II	4
APMU 111 College Choir APMU 300 Chamber Music	OR 1-2
APMU 121-452 Applied Music: Private Study (four semesters on any instrument at 2 semester hours)	8
Three of the following: MUS 302 Great Composers MUS 310 Topics in Sacred Music MUS 313 Music History I MUS 314 Music History II MUS 350 Music from the Baroque Era (1600 to 1750) MUS 351 Music in the Classic Era (1750-1825) MUS 352 19th-Century Music MUS 353 20th-Century Music	9
TOTAL	26-27

MUSIC COURSES (MUS)

100 Introduction to Listening (3) (A)

Offers a user-friendly introduction to the music of such great classical composers as Bach, Beethoven, and Mozart, while including limited encounters with the musical expressions of popular culture. An ideal survey for non-musicians lacking musical knowledge and performance skills, the course should also serve as a helpful introduction to the realm of classical music for those who are contemplating a music major. Films, recordings, lectures, web pages, and live concerts on campus and in the community provide opportunities to develop a deeper understanding and enjoyment of our musical heritage.

101 Basic Musicianship (3) (A)

Basic fundamentals of music including pitch and rhythmic notation. Students learn to make music from a written score using recorders and a variety of other simple folk instruments. Offered each fall.

201 Music & Art in the Western World (3) (A)

Explores the traditions of music, painting, sculpture, and architecture of the Western world. Beginning with the Greeks and continuing through the present time, many individual works from important art periods are introduced. Discussions include how the arts reflect the sociocultural conditions of their time and place, how media are used, and how the elements in each art form contribute to the aesthetic response. Artistic contributions of minorities and women are included. Students visit the Chrysler Museum of Art and attend two live music performances. Identical to ARTH 201.

202/302 Great Composers (3) (A)

An in-depth study of the life and works of a single composer. Students become familiar with the composer's life, the historical setting, and gain intimate knowledge of important compositions from all periods of the composer's career through guided listening.

213/313 Music History I (3) (A)

A chronological study of music from its origins through the early 18th century. The 300 level requires a research project and some analysis. Prerequisites: MUS 100, 201 or consent. Offered fall of even-numbered years.

214/314 Music History II (3) (A)

A continuation of MUS 213/313 from the 18th century to the present. Prerequisite: MUS 100, 201, 213/313 or consent. Offered spring of odd-numbered years.

225, 226 Intermediate Musicianship I, II (4, 4)

Music theory, sight-singing and ear training are studied as part of a program to develop complete musicianship. Music theory is the logical and systematic study of the rationality of music that will eventually justify and broaden natural musical instincts and intuitions. Sight-singing and ear training enhance the musician's ability to envision the

sound of a musical composition from an examination of the printed score. Elementary harmony and analysis including modes, triads and inversions, melodic construction and simple harmonization with primary and secondary triads are included. Prerequisite: ability to read music notation. MUS 225 offered fall of even-numbered years, MUS 226 offered spring of odd-numbered years.

250/350 Music from the Baroque Era (1600 to 1750) (3) (A)

A listening course exploring music from the Baroque. Students listen to works from this period in their entirety and discover how this music reflects the cultural history of the era. Works by Vivaldi, Couperin, Scarlatti, Handel, Bach, and others are included. Students have the opportunity to attend selected live performances as part of their course work. Offered fall of even-numbered years.

251/351 Music in the Classic Era (1750-1825) (3) (A)

A listening course exploring music from the Classic era. Students listen to works from this period in their entirety and discover how this music reflects the cultural history of the era. Works by Haydn, Mozart, Beethoven, and others are included. Students have the opportunity to attend selected live performances as part of their course work. Offered spring of odd-numbered years.

252/352 19th-Century Music (3) (A)

A listening course exploring music from the 19th century. Students listen to works from this period in their entirety and discover how this music reflects the cultural history of the era. Works by Beethoven, Schubert, the Schumanns (both Clara and Robert), Chopin, Liszt, Verdi, Berlioz, Brahms and others are included. Students have the opportunity to attend selected live performances as part of their course work. Offered fall of odd-numbered years.

253/353 20th-Century Music (3) (A)

A listening course exploring music from the 20th century. Students listen to works from this period in their entirety and discover how this music reflects the cultural history of the era. Works by Debussy, Ravel, Puccini, Bartok, Stravinsky, Schoenberg, Ives, Copland, Varèse, Barber, Glass, Gorecki, Pärt, Zwilich, and others are included. Students have the opportunity to attend selected live performances as part of their course work. Offered spring of even-numbered years.

310 Topics in Sacred Music (3)

An in-depth study of some aspect of sacred music including, but not limited to, hymnology and sacred choral literature, sacred music history, and directing choirs, all within the context of a variety of religious traditions. Offered each semester.

321 Conducting Techniques (3)

Offers basic and advanced skills for choral and instrumental conductors. All conducting patterns,

instrumental and choral techniques, rehearsal technique, and score study are included. Prerequisite: MUS 226, APMU 111, 211, or equivalent. Offered on demand.

325, 326 Advanced Musicianship I, II (4, 4)

A continuation of MUS 225 and 226, this class focuses on a wide range of musical styles from the Renaissance to the present. More complex chords and larger forms (fugues, rondo, theme and variations, sonata) are studied. Various strategies to analyze musical compositions are investigated. Post-impressionist and serial composition techniques are included. Theoretical analysis and study are accompanied by parallel exercises in sight-singing and ear training. Prerequisite: MUS 226. MUS 325 offered fall of odd-numbered years; MUS 326 offered spring of even-numbered years.

354 Vocal Music Methods & Materials, K-12 (3)

Designed for students seeking certification in music education, this course examines vocal music within the context of varied musical experiences designed for students in school music programs. The first half of the course covers the developmental stages of the elementary school child. The second half deals with middle and senior high school music curricula. Both halves include observation of successful programs.

480 Senior Project (3) (I)

Intended as the culminating experience in the music major, students present a formal recital or write an historical or critical thesis in which they use a carefully selected repertoire to demonstrate the successful integration of applied performance skills, knowledge of music and cultural history, theoretical/analytical proficiency, and aural skills. Students presenting a formal recital prepare a 45-minute oral presentation for the music faculty to discuss the stylistic, historical, and technical nature of each musical selection. The written summary of this research is published in the recital program as program notes. Students perform the recital twice: once off campus, and once in Virginia Wesleyan's Hofheimer Theatre. The historical or critical thesis option is also accompanied by an oral presentation and defense of the material researched. The Senior Project is required of all music majors and may be elected by students choosing a music concentration for their humanities divisional major. Prerequisite: MUS 314 and 326. Should be taken during the final semester of applied music study.

APPLIED MUSIC COURSES (APMU)

111 College Choir (1) (A)*

The College Choir is offered as a cultural experience for any student of the College. A wide variety of choral literature is studied and performed, occasionally accompanied by a professional orchestra. In addition to learning the selected repertoire, members of the choir are given many opportunities to develop musicianship and vocal skills. While the ability to read music notation is not required, participants must be able to match pitch. Offered

each semester. **Three semester hours must be completed to fulfill a general studies requirement.*

113 Class Voice (2)

Offered in conjunction with Wesleyan Singers, students study basic vocal techniques with emphasis on developing the voice for both solo and choral use. Prerequisite: membership in Wesleyan Singers. Offered each semester.

121-452 Applied Music: Private Study (Instrumental, Voice, Piano, Guitar) (2) (A)*

Private applied music study is offered to students enrolled in the college regardless of previous musical background or major interest. A serious commitment to learning about classical music literature and the technique required to perform such literature is required from the student. Students take a one-hour private lesson each week and should expect to practice daily for at least one hour. Practice rooms are available to students registered for applied music study. Additionally, during each semester of study, students attend four Thursday-at-11 master classes and four live concerts. Other requirements are available from individual teachers. The college designates teachers from the community to supervise each student. This course requires a \$250 fee in addition to regular tuition. Prerequisite: Basic Musicianship (MUS 101) or show proficiency. Offered by arrangement with the coordinator for applied music studies. Offered each semester. **Four semester hours must be completed to fulfill a general studies requirement.*

211 Wesleyan Singers (1) (A)*

A small performance ensemble modeled on professional standards, the Wesleyan Singers offers a unique opportunity for advanced students to explore singing on a higher level than is possible in a larger group of non-auditioned singers. Study and performance of appropriate literature for a small group allows the art of choral singing to be more fully realized. Within the ensemble, duets, trios, quartets, etc. may be formed according to talent and interest. An audition is required. Prerequisite: membership in College Choir. Offered each semester. **Three semester hours must be completed to fulfill a general studies requirement.*

230 Wesleyan Singers' Performance Tour (3) (Winter Session)

A performance tour of approximately one-week duration with concerts each night. Performances may also be scheduled during the day in schools and retirement homes. Students experience the "agony and ecstasy" of live performance before different audiences each day and are challenged to develop musical and ensemble skills which will serve them in the future. Another challenge is avoiding illness in order to perform at peak level each day. A week's intensive rehearsal is scheduled before departure and several performances on campus and in the area occur upon return. The time commitment is considerable: daily 4-hour rehearsals the week before departure, approximately 4 hours/day on tour including pre-concert rehearsal in new

venue, and 8 or more hours the final week—approximately 48 hours of actual contact time for the course. Prerequisite: membership in Wesleyan Singers. Offered each Winter Session.

300 Chamber Music (2)

Students explore the body of chamber music written for their instrument and select and prepare a chamber music composition for performance with a professional ensemble. A weekly one-hour coaching session offers rehearsal strategies as well as discussion of musical ideas and interpretations. In addition, students prepare a listening journal that documents their listening experiences and generate an annotated bibliography of chamber music compositions for their instrument. A \$250 applied music fee is charged.

PHILOSOPHY

DR. STEVEN M. EMMANUEL, Program Coordinator
 DR. PATRICK A. GOOLD
 DR. LAWRENCE D. HULTGREN
 DR. R. CATHAL WOODS

Philosophy in the Curriculum

The Greek word philosophia ('philosophy') is a compound term which derives from the roots philein ('to love') and sophia ('wisdom') and is commonly translated 'love of wisdom.' For Socrates, and those who followed his example, the love of wisdom took the form of a disciplined reflection about human life and conduct. Convinced that intellectual and moral integrity go hand in hand, Socrates raised fundamental questions about the nature of justice, virtue, and the good life. Proceeding by careful analysis and rigorous dialectic, he sought a knowledge of reality on which to establish a firm foundation for making sound moral judgments. Though philosophical practice has taken many different forms over the centuries, the conception of philosophy as a process of critical inquiry aimed at a deeper understanding of self and world remains the dominant one.

In keeping with the ideal of a liberal arts education, the study of philosophy promotes the development of analytical, critical, and interpretive abilities that are important for life in general. Properly pursued, philosophical study cultivates the appetite and capacity for self-examination and reflection, for the open exchange and debate of ideas, for responsible and intelligent participation in community affairs, and for lifelong learning.

The program in philosophy is designed to provide students with a coherent intellectual structure of study, while acquainting them with the broad diversity of ideas and approaches within the Western philosophical tradition and beyond. The curriculum covers significant periods and prominent figures in the history of intellectual thought, as well as the central subfields of philosophy and their distinctive problem sets. Though the department recognizes that philosophy is a valuable preparation for careers in

many fields, its approach to teaching reflects a basic commitment to the idea that philosophy is best thought of as a practice and way of life.

Major Requirements

COURSE NUMBER AND TITLE	SEM. HRS.
18 HOURS MUST BE AT THE 300/400 LEVEL	
Two of the following: PHIL 101 Individual and Society PHIL 102 Contemporary Moral Issues PHIL 104 The Examined Life PHIL 212 Types of Ethical Theory PHIL 221/321 Ethics and Health Care PHIL 253 Social and Political Philosophy PHIL 272/372 Beyond the Western Tradition PHIL 304 Environmental Ethics	6
PHIL 109 Critical Reasoning	3
PHIL 209 Methods of Logic	3
PHIL 332 Ancient Philosophy	3
PHIL 336 Early Modern Philosophy	3
One of the following: PHIL 334 Medieval Philosophy PHIL 338 19th-Century Philosophy PHIL 340 20th-Century Philosophy PHIL 350 Existential Philosophy	3
PHIL 400 Philosophy Seminar	3
Additional courses in philosophy	6
TOTAL	30

Students majoring in philosophy who transfer credit for philosophy courses taken at other institutions should consult with the departmental coordinator to determine how that credit is to be applied.