A. Military Traditions—M S I
Winter. 0(0-1) Approval of department.

B. Evolution of Military Leadership—M S II
Fall, 0(0-1) Approval of department or M S II standing. HST 235 concurrently.

C. Military Career Preparation—M S III
Spring, 0(0-1) Approval of department or M S II standing.

D. Advanced Camp Preparation—M S IV
Winter. 0(0-1) Approval of department or M S III standing.

E. Military Justice and Unit Administration
Fall, 0(0-1) Approval of department or M S IV standing.

121. Preview of Military Science
Fall, Winter, Spring, Summer. 1(1-0)
Approval of department.
Role of the ROTC officer in the Army. Assists the student in planning a curriculum to satisfy requirements for a commission.

122. Marksmanship and Hunter Safety
Fall, Spring, 1(0-2) M S 121 or approval of department.
Small arms marksmanship and safety. Practical exercises on local firing ranges. Individual basic military marksmanship and the skills necessary to participate in a competitive or recreational shooting program.

221. Fundamentals of Military Art and Tactical Science
Fall. 1(1-0) M S 121, M S 041A, M S 122.
Contemporary military tactical doctrine, operations, principles of modern land warfare; analysis of historical examples, application of current doctrine to hypothetical situations.

223. Terrain Analysis and Land Navigation
Winter, Spring, 2(2-0) M S 121 and approval of department.
Military topographic maps, special maps, map profiles, specifications and uses. Terrain analysis for military tactical operations. Land navigation with the lensatic and Silva compass.

324. Military Teaching
Fall, Winter. 4(4-12) Basic course, approval of department.
Methods of teaching manipulative skills to groups with varying educational backgrounds. Emphasis on determination of entry behavior, progress analysis, testing and test construction. Introduction to current teaching aids. Practical experience in simulated field situations is stressed during laboratory.

325. Military Management
Spring. 4(3-2) M S 324 or approval of department.
Task analysis approach to missions. The subject of tactics is used as a teaching vehicle for the managerial approach to the preparation and execution phases of military operations. Emphasis is placed on physical and moral leadership during the laboratory sections.

426. Military Law
Winter. 4(4-0) Approval of department.
Jurisdiction and responsibility of the Army commander and junior leader in the application of military justice. Implications of Army operations as related to the rules of land warfare.

427. Seminar
Spring. 1(1-0) Approval of department.
Precommissioning orientation stressing current military policies, procedures, customs and trends.

499. Independent Study in Military Science
Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 6 credits. Approval of department and juniors. Individual research and study in an area related to military science as approved and directed by the Department of Military Science.

MUSIC

College of Arts and Letters

100. Theory Review
Fall, Summer. 2(2-1) For majors who need theory review. Basic course in fundamentals and ear training.

112. Chamber Music
Fall, Winter, Spring, Summer. 1(1-0)
May reenroll for a maximum of 18 credits. Approval of department. Performance of works for small ensembles.

118. Band
A. Marching Band
Fall, 1 credit. May reenroll for credit. Membership determined by audition.
The Marching Band participates at football games.

B. Spartan Brass
Winter, 1 credit. May reenroll for credit. Membership determined by audition.
The Spartan Brass participates at basketball games.

C. Concert Band
Fall, Winter, Spring, 1 credit. May reenroll for credit. Membership determined by audition.
Public appearances are scheduled on campus each term.

D. Symphonic Band
Fall, Winter, Spring, 1 credit. May reenroll for credit. Membership determined by audition.
A high level of achievement in performing ability is required. Concerts are scheduled both on and off campus.

E. Wind Ensemble
Fall, Winter, Spring, 1 credit. May reenroll for a maximum of 12 credits. Membership determined by audition.
Full range of wind literature is performed. Public concerts are presented both on and off campus.

F. Repertory Band
Fall, Winter, Spring, Summer. 1 credit. May reenroll for a maximum of 12 credits. Membership determined by audition.
Public appearances are scheduled on campus each term.

133A. Symphony Orchestra
(133) Fall, Winter, Spring. 1(0-5)
May reenroll for a maximum of 12 credits. Admission by audition.
Preparation and performance of symphony and operatic repertoire under direction of faculty and guest conductors of international reputation.

133B. Chamber Orchestra
Fall, Winter, Spring. 0(0-5)
May reenroll for a maximum of 12 credits. Membership determined by audition.
A specialized ensemble of advanced performers concentrating on the repertoire of the classic composers, and modern repertoire for chamber orchestra. Rehearsals and performances with faculty and guest artists.

135. Music in Elementary Education
Fall, Winter, Spring, Summer. 4(3-3)
Elementary education majors.
Basis, scope and sequence of music instruction in the elementary schools with an introduction to basic knowledge and skills used in elementary school music.

141. Class Instruments and Voice
Fall. 1(0-2) Knowledge of notation. Music majors, or approval of department. Class instruction in piano, voice, violin, cello, clarinet, and cornet.

142. Class Instruments and Voice
Winter. 1(0-2), MUS 141.
Continuation of MUS 141.

143. Class Instruments and Voice
Spring. 1(0-2) MUS 142.
Continuation of MUS 142.

145. Music Foundations I
Fall, Winter, Spring. 3(3-0) MUS 135 and approval of department.
Development of understanding and knowledge of music fundamentals, ear training, music reading, rhythm, and other basic music perceptions. Designed specifically for elementary classroom teachers who elect a strong concentration in music.

147. Elementary Piano
Fall, Winter, Spring. 2(2-2) MUS 145 or approval of department. Elementary Education and Physical Education and Recreation majors.
Beginning class piano instruction. Development of ability to play the three principal chords in all keys and to harmonize simple melodies using these chords. Transposition of simple melodies. Ability to play melodies and rhythms suitable for use in lower intermediate grades or in recreation work.

148. Elementary Piano
Winter. Spring. 2(2-2) MUS 147.
Elementary Education majors.
Continuation of MUS 147.

150. Keyboard Instruments and Harp
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 24 credits. Audition required.
Instructor in piano, organ and harp.

151. Voice
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 24 credits. Audition required.
152. Stringed Instruments
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 24 credits. Audition required.

153. Woodwind Instruments
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 24 credits. Audition required.

154. Brass Instruments
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 24 credits. Audition required.

155. Percussion
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 24 credits. Audition required.

156. Special Music
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 24 credits. Audition required.

180. Basic Harmony
Fall. 3(3-1)
Fundamentals of basic musicianship: notation, clefs, scales, intervals, triads, meter, rhythm, and tonality. The analysis and writing of diatonic harmony in the style of the Bach 4-part choral.

181. Basic Harmony
Winter. 2(3-1) MUS 180.
Continuation of MUS 180.

182. Basic Harmony
Spring. 3(3-1) MUS 181.
Continuation of MUS 181.

183. Aural Harmony
Fall, Winter, Spring. 3(3-1) MUS 180 concurrently.
The aural counterpart of basic harmony. Drill in harmonic, melodic and rhythmic dictation. Sight singing and keyboard harmony.

184. Aural Harmony
Fall, Winter, Spring. 3(3-1) MUS 180 concurrently.

185. Aural Harmony
Fall, Winter, Spring. 3(3-1) MUS 180 concurrently.

190. State Singers
Fall, Winter, Spring. 1(0-4) May reenroll for a maximum of 12 credits. Membership determined by audition; ability of sight reading. Four hours of rehearsals a week. Attendance at all rehearsals and public performance obligatory.

191. Chorus
Fall, Winter, Spring. 1(0-2-12) May reenroll for a maximum of 12 credits. Two and one-half hours of rehearsals per week. Attendance at all rehearsals and public concerts obligatory.

192. Glee Club, Men and Women
Fall, Winter, Spring. 1(0-3) May reenroll for a maximum of 12 credits. Membership determined by audition. Three hours of rehearsals a week. Attendance at all rehearsals and public concerts obligatory.

193. University Chorale
Fall, Winter, Spring. 1(0-4) Audition. Choral ensemble designed primarily for graduate and upper-class undergraduate students. Representative literature for chamber chorale with emphasis on Renaissance, Baroque, and contemporary composers. Limited to 25 students.

195. Jazz Laboratory Band
Fall, Winter, Spring, Summer. 1(0-4) May reenroll for a maximum of 12 credits. Membership determined by audition.
Practical experience in playing jazz music in the jazz idiom. Techniques of rehearsing a stage band. Playing of student arrangements; performance of jazz composition and arrangements in concert.

200H. Honors Work
Fall, Winter, Spring, Summer. 1 to 16 credits. May reenroll for a maximum of 16 credits. Approval of department.

208. Basic Keyboard Tuning: Theory and Practice I
Fall, Summer. 2(2-1), MUS 182, MUS 185 or approval of department.
Basic acoustics. Historical development of musical scales and tuning systems. Classical and modern methods of keyboard tuning.

209. Basic Keyboard Tuning: Theory and Practice II
Winter. 2(1-3) MUS 208.
Continuation of MUS 208.

210. Basic Keyboard Tuning: Theory and Practice III
Spring. 2(1-3) MUS 209.
Continuation of MUS 209.

IDC. Introduction to Latin America I
Fall, Winter, Spring. 3(3-1) MUS 180 concurrently.
For course description, see Interdisciplinary Courses.

224. History of Music
Fall. 3(3-0) MUS 183.
Music from ancient Greece through Romanesque and Gothic periods, concluding with the Renaissance, Greek theory and ethos; age of plainsong; development of polyphony; instruments peculiar to period under question.

225. History of Music
Winter. 3(3-0) MUS 224.
Baroque and classical periods. Special attention to fugue, operas, oratorio, sonata, and symphony. Analysis of characteristic works.

226. History of Music
Spring. 3(3-0) MUS 225.
Romantic period, impressionism, and contemporary trends. Continuation of development of form, melody, rhythm, and tonality. Final examination is comprehensive, covering MUS 224, MUS 225 and MUS 226.

241. Advanced Class Piano
Fall. 1(0-2) MUS 143 or approval of department. For School Music Choral majors only.
Continuation of Class Piano MUS 143. Special emphasis given to developing practical skills at the piano for use in the public school classroom.

242. Advanced Class Piano
Winter. 1(0-2) MUS 241 or approval of department.
Continuation of MUS 241.

243. Advanced Class Piano
Spring. 1(0-2) MUS 242 or approval of department.
Continuation of MUS 242.
325. Advanced Aural Harmony
Fall, Winter, Spring, Summer. 1(0-2)
MUS 284, MUS 285 concurrently.

326. Advanced Aural Harmony
Fall, Winter, Spring, Summer. 1(0-2)
MUS 284, MUS 285 concurrently.

327. Opera Workshop
Fall, Winter, Spring. 1 to 2 credits.
May reenroll for a maximum of 6 credits. Approval of department.

328. Advanced Keyboard Tuning:
Theory and Practice I
Fall. 3(1-3) MUS 210 or approval of department.

329. Advanced Keyboard Tuning:
Theory and Practice II
Winter. 3(1-3) MUS 208.
Continuation of MUS 308.

330. Advanced Keyboard Tuning:
Theory and Practice III
Spring. 3(1-3) MUS 309.
Continuation of MUS 309.

331. Church Service Playing
Fall, Winter, Spring. 2(2-0)
May reenroll for a maximum of 6 credits. Three terms of pipe organ.

332. Carillon
Fall, Winter, Spring. 2 credits.
May reenroll for credit. MUS 152; 6 terms or piano and approval of department.

333. Composing and Arranging for Jazz Ensembles
Fall, Winter, Spring, Summer. 3(2-2)
May reenroll for a maximum of 6 credits. MUS 152; approval of department.

334. Ensemble and Conducting
Fall, Spring. 3(1-4) MUS 185 or approval of department.

335. Ensemble and Conducting
Fall, Winter, Spring. 1 to 4 credits. May reenroll for a maximum of 24 credits. Six terms of MUS 153 or approval of department.

336. Ensemble and Conducting
Winter. 3(1-4) MUS 335.
Continuation of MUS 335.

337. Class Instruments
Fall, Winter, Spring. 10(0-2)
May reenroll for credit. Majors. Study for one term of instruments not included among basic instruments. Not more than two may be studied at same time. Class instruction in viola, string bass, flute, oboe, bassoon, French horn, trombone, and percussion.

338. Teaching Music in the Elementary School I
Fall, Winter, Spring. 3(3-0)
Approval of department.

339. Teaching Music in the Elementary School II
Winter, Spring, Summer. 3(3-0) MUS 345 and approval of department.

340. Methods and Literature
Fall, Summer of odd-numbered years. 2(1-2) Six terms of study on applied instrument or voice, or approval of department.

341. Methods and Literature
Winter. 2(1-2) Six terms of study on applied instrument or voice, or approval of department.

342. Methods and Literature
Spring, Summer of even-numbered years. 2(1-2) Six terms of study on applied instrument or voice, or approval of department.

343. Keyboard Instruments and Harp
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 24 credits. Six terms of MUS 150 or approval of department.

344. Voice
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 24 credits. Six terms of MUS 151 or approval of department.

345. Woodwind Instruments
Fall, Winter, Spring. 1 to 4 credits. May reenroll for a maximum of 24 credits. Six terms of MUS 153 or approval of department.

346. Brass Instruments
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 24 credits. Six terms of MUS 154 or approval of department.

347. Percussion
Fall, Winter, Spring. 1 to 4 credits. May reenroll for a maximum of 24 credits. Six terms of MUS 155 or approval of department.

348. Piano Sight Reading and Accompanying
Fall, Winter, Spring. 2(0-4) May reenroll for a maximum of 12 credits. Piano major or approval of department.

349. Studies in Style and Form
Fall, Summer. 2(2-1) MUS 282.
Analysis and creative writing of technical and structural practices in music of various periods, with special emphasis on the twentieth century.

350. Studies in Style and Form
Winter, Summer. 2(2-1) MUS 282.
Analysis and creative writing of technical and structural practices in music of various periods, with special emphasis on the twentieth century.

351. Orchestration
Fall, Summer. 2(2-0) MUS 282.
Modern orchestral resources and scoring for various instrumental groups.

352. Orchestration
Spring, Summer. 2(2-0) MUS 384.
Continuation of MUS 284.

353. Counterpoint
Fall, 2(2-0): MUS 285.
Creative and analytical work with two-part counterpoint in the style of J. S. Bach.

354. Counterpoint
Winter, 2(2-0) MUS 386.
Creative and analytical work with three-part counterpoint in the style of J. S. Bach.

355. Counterpoint
Spring, 2(2-0) MUS 387.
Creative and analytical work with three and four-part counterpoint in the style of J. S. Bach.

356. Clinical Training in Music Therapy
Fall, Winter, Spring. 1 to 15 credits. Music therapy majors. Six months internship in an accredited neuropsychiatric hospital.
400H. Honors Work  
Fall, Winter, Spring, Summer. 1 to 15 credits. May reenroll for a maximum of 16 credits. Approval of department.

403. Music Literature for Children  
Fall, Winter, Spring, Summer. 3(3-0) MUS 346, or ED 327R or ED 327P.  
Appropriate musical materials for both performance and listening instruction in elementary and secondary schools. Particular emphasis on the music of culturally different peoples.

408. Piano Technology I  
Fall. 3(1-2) MUS 310 or approval of department.  
Methods of analysis and practice in restoring the original tone of old pianos. Repairing or replacing all worn parts. Advanced concert tuning and tone regulation.

409. Piano Technology II  
Winter. 3(1-2) MUS 309.  
Continuation of MUS 408.

410. Piano Technology III  
Spring. 3(1-3) MUS 409.  
Continuation of MUS 409.

411. Opera  
Winter of odd-numbered years, 2(1-2) credits.  
History of opera from 1600 to the present.

412. Oratorio  
Fall of even-numbered years, Summer. 2(1-2) credits.  
Six terms of voice or approval of department.  
History of oratorio from 1650 to the present.

415A. Renaissance Music  
Fall. 2 credits. MUS 182 or approval of department.

415B. 19th Century Music  
Fall. 2 credits. MUS 182 or approval of department.

415C. Keyboard Music, Seventeenth through Eighteenth Centuries  
Fall of even-numbered years. 2 credits. MUS 182 or approval of department.

415E. German Lieder  
Fall of odd-numbered years. 2 credits. MUS 182 or approval of department.

415F. Organ Literature to 1700  
Fall of odd-numbered years. 2 credits. MUS 182 or approval of department.

416A. Baroque Music  
Winter. 2 credits. MUS 182 or approval of department.

416B. Twentieth Century Music, European  
Winter. 2 credits. MUS 182 or approval of department.

416C. Piano Music, Nineteenth Century  
Winter of odd-numbered years. 2 credits. MUS 182 or approval of department.

416E. French-Italian Art Song  
Winter of even-numbered years. 2 credits. MUS 182 or approval of department.

416F. Organ Literature From 1700 to 1900  
Winter of even-numbered years. 2 credits. MUS 182 or approval of department.

417A. Classical Music  
Spring. 2 credits. MUS 182 or approval of department.

417B. Twentieth Century Music, American  
Spring. 2 credits. MUS 182 or approval of department.

417C. Piano Music, Twentieth Century  
Spring of odd-numbered years. 2 credits. MUS 182 or approval of department.

417E. English-American Art Song  
Spring of even-numbered years. 2 credits. MUS 182 or approval of department.

417F. Organ Literature From 1900 to Present  
Spring of even-numbered years. 2 credits. MUS 182 or approval of department.

418H. Honors Course in Music Literature  
Fall. 2(2-0) MUS 226 and approval of department.  
A historical class. Primary emphasis on instrumental and vocal music 1770-1900, but work may be directed towards the student's special field of interest.

419H. Honors Course in Music Literature  
Winter. 2(2-0) MUS 226 and approval of department.  
Continuation of MUS 418H.

421. Music and Worship  
Fall. 3(3-0) MUS 226 or approval of department.  
Relationship of music and liturgy to Christian worship. Traditional liturgies and forms of service of the Christian churches with emphasis on function and place of music in worship.

422. Hymnology  
Winter. 3(3-0) MUS 226 or approval of department.  
Greek and Latin hymns, canticles, and transition from psalmody into hymnody. Hymns and tunes studied with emphasis on their natural place in church year. Special attention to anthem settings of hymns and adaptation of traditional melodies, especially Gregorian.

423. Choral Repertoire for the Church  
Spring, Summer. 3(3-0) Approval of department.  
Choral literature for church choirs; emphasis on motets, anthems, responses, and materials for both youth and adult choirs.

424. Preparatory Musicology  
Fall. 3(3-0) MUS 226, MUS 282.  
A seminar dealing with research in various fields of musicology, including ethnomusicology.

425. Preparatory Musicology  
Winter, Summer. 3(3-0) MUS 424.  
Selected topics in music history from the ancient Greeks to 1600.

429. Band Materials  
Spring, Summer. 1(0-2) May reenroll for credit. Juniors.  
Analysis and performance of literature suitable for school bands.

435. Advanced Conducting  
Spring, Summer. 2(2-0) Approval of department.  
Continuation of MUS 434.

438. Brass and Woodwind Techniques  
Spring, Summer. 2(1-2) Senior music majors.  
Materials and contemporary pedagogical practices of group wind instrumental instruction.

440. Fundamentals of Electronic Music  
Fall, Summer. 2(2-0) MUS 282.  
Instruction in the use of the Electronic Music Studio.

441. Fundamentals of Electronic Music  
Winter. 2(1-2) MUS 440.  
Supervised use of the Electronic Music Studio.

442. Composition in Electronic Music  
Spring, Summer. 2(1-2) MUS 441.  
Assigned use of the Electronic Music Studio.

450. Recreational Music  
Spring, Summer of odd-numbered years. 2(2-0) Majors.  
Organization and administration of a community music program for adults, community choirs, orchestra, and band. Nonsymphonic instruments and their role in recreation. Summer camp and playground music; Recreational music as it is organized and used by industries.

462. Studio Teaching and Observation  
Fall. 2(1-2) MUS 347, MUS 348, MUS 349.  
Supervised studio teaching in classes and private lessons plus one-hour seminar each week.

463. Studio Teaching and Observation  
Winter. 2(1-2) MUS 462.  
Continuation of MUS 463.

464. Studio Teaching and Observation  
Spring. 2(1-2) MUS 463.  
Continuation of MUS 464.

465. Practicum: Sacred Music  
Fall, Winter, Spring. 3(0-6) May reenroll for a maximum of 6 credits. MUS 314, MUS 339, MUS 348.  
Supervised experience in all phases of sacred music by assisting at adult and junior choir rehearsals and church services, service planning, preparation and performance.

470. Influence of Music on Behavior  
Fall. 3(3-0) Nine credits of psychology or approval of department.  
Study of the physiological and psychological effects of music, relation of music to health. Experimental studies, related philosophical and psychological theory will be reviewed.
804. Seminar in Music Learning
Winter, Summer. 3(3-0) Approval of department.
Detailed analysis of the conditions of music learning for teachers of music including consideration of perception, motivation and concept formation.

805. Seminar in Music Curriculum
Spring, Summer. 3(3-0) Approval of department.
Development of goals, objectives, learning sequence and evaluative techniques for music learning at all instructional levels.

812. Research Problems in Music
Fall, Winter, Spring, Summer. Variable credit.

813. Chamber Music
Fall, Winter, Spring, Summer. 1(1-0)
May reenroll for a maximum of 6 credits. Approval of department.
Performance of works for small ensembles.

815. Seminar in Chamber Music: 18th Century
Fall, Summer. 2(2-0) Approval of department.
Intensive study of selected chamber music works of the 18th century.

816. Seminar in Chamber Music: 19th Century
Winter, Summer. 2(2-0) Approval of department.
Intensive study of selected chamber music works of the 19th century.

820. Music Workshop
Summer. 1 to 6 credits. May reenroll for a maximum of 6 credits. Approval of department.

825. Acoustics for Musicians
Spring. 3(3-0) Approval of department.
A critical examination of encyclopedias, indices, and other aids to research.

830. Sixteenth Century Counterpoint
Fall of even-numbered years. Summer. 3(3-0) MUS 482 or approval of department.
Stylistic analysis of the works of Orlando Lasso and Palestrina.

831. Sixteenth Century Counterpoint
Winter of odd-numbered years. Summer. 3(3-0) MUS 830.
Continuation of MUS 830.

832. Sixteenth Century Counterpoint
Spring of odd-numbered years. Summer. 3(3-0) MUS 831.
Continuation of MUS 831 to include a study of madrigal counterpoint.

834. Seminar in Composition
Fall, Winter, Spring, Summer. 2(2-0)
May reenroll for a maximum of 24 credits. Approval of department.
Study of contemporary music with emphasis on compositional procedures.

835. Composition
Fall, Winter, Spring, Summer. 1 to 2 credits. May reenroll for a maximum of 24 credits. Approval of department.
Advanced composition.

843. Pedagogy of Theory
Fall, Summer. 3(3-0) Approval of department.
Methods, content, and textbooks for teaching basic theory.

844. Pedagogy of Theory
Winter, Summer. 3(3-0) Approval of department.
Continuation of MUS 843 with emphasis upon new instructional media, and upon methods and materials in ear training and sight singing.

845. Pedagogy of Theory
Spring, Summer. 3(3-0) Approval of department.
Methods, content, and textbooks for teaching counterpoint, form, and orchestration.

846. Minor Instrument Study: Strings
Fall, Winter, Spring, Summer. 1(1-0)
May reenroll for a maximum of 12 credits.
Secondary instrument for students enrolled in string specialist program.

847. Minor Instrument Study: Brass
Fall, Winter, Spring, Summer. 1(1-0)
May reenroll for a maximum of 12 credits.
Secondary instrument for students enrolled in brass specialist program.

848. Minor Instrument Study: Woodwinds
Fall, Winter, Spring, Summer. 1(1-0)
May reenroll for a maximum of 12 credits.
Secondary instrument for students enrolled in woodwind specialist program.

850. Applied Music
Fall, Winter, Spring, Summer. 3 credits for Applied Music majors; 2 credits for others. May reenroll for credit.

852. Choral Technique and Materials
Spring. 3(3-0) Completion of undergraduate program in music education.
Advanced course for further development of choral proficiency. Demonstrations of choral techniques, conducting by students, examination and evaluation of new materials.

860. Problems in Analysis
Fall, Winter, Spring. 4(4-0)
May reenroll for a maximum of 8 credits. Approval of department.
An application of analytical procedures to school music repertoire.

890. Materials of Music
Fall, Winter, Spring. 1 to 4 credits. MUS 242.
Correlation of the areas of music theory as a basis for the study of 19th and 20th century music.
9.5.5. Gathering able credit.

899. Consideration of problems of music teaching and learning with readings from aesthetics, psychology, human growth, and education.

915. Medieval Music
Fall. 3(3-0)
Investigation of various developments in European music to middle of fifteenth century. Some attention given to Gregorian Chant as well as to various types of secular Monody, but greater stress is laid on the forms and styles of Polyphonic music.

916. Renaissance Music
Winter. 3(3-0)
Investigation of developments in European music from 1450 to 1600, tracing developments in both sacred and secular music.

917. Music of the Seventeenth Century
Spring. 3(3-0)
Instrumental and vocal music of Early Baroque period.

924. Seminar in Musicology
Fall, Winter, Spring. 3(3-0) May reenroll for a maximum of 9 credits. Approval of department.

943. Survey of the History of Theory
Winter. 2(2-0) Approval of department. Significant theoretical treatises from the 6th century B.C. to the early 20th century.

954. Music Supervision
Summer of even-numbered years. 3(3-0) Completion of undergraduate program in Music Education.

955. Current Tendencies in Music Education
Winter of even-numbered years. Summer of odd-numbered years. 3(3-0) Completion of undergraduate program in Music Education.

956. Advanced Research Techniques in Music
Spring, Summer. 3(3-0) Approval of department. Application of behavioral research to music including development and validation of original data-gathering devices.

960. Analytical Studies
Fall. 3(3-0) Approval of department.
Analysis of melody, harmony, rhythm, color, texture, counterpoint, and form in music from the thirteenth century through the late sixteenth/early seventeenth century.

961. Analytical Studies
Winter. 3(3-0) Approval of department.
Analysis of melody, harmony, rhythm, color, texture, counterpoint, and form in music from the late seventeenth/early eighteenth century through the nineteenth century.

962. Analytical Studies
Spring. 3(3-0) Approval of department.
Analysis of melody, harmony, rhythm, color, texture, counterpoint, and form in music of the twentieth century.

963. Schenker Analysis
Fall. 2(2-0) Approval of department.
Analytical techniques and concepts of Heinrich Schenker. Examination of his sketches and writings, reading about him, and analysis of music using his techniques.

964. Set-Theoretic Analysis of Atonal Music
Spring. 2(2-0) Approval of department.
Set-Theoretic principles and their application to the analysis of atonal music.

970. Contrapuntal Techniques
Fall of odd-numbered years. Summer. 3(3-0) MUS 482 or approval of department. Advanced contrapuntal practice from the sixteenth century to the present.

971. Contrapuntal Techniques
Winter of even-numbered years. Summer. 3(3-0) MUS 970. Continuation of MUS 970.

972. Contrapuntal Techniques
Spring of even-numbered years. Summer. 3(3-0) MUS 971. Continuation of MUS 971.

999. Doctoral Dissertation Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

College of Natural Science
University College

Students who have not taken any of the required natural science courses, may take any three course from the following list:
N S 115, 116, 121, 131, 140, 151, 161, 181, 192, 322
122 180
125 117, 132, 141, 182, 193, 325
135 113, 120, 133, 150, 160, 183, 191, 321
142 118, 193
152 193
162 193
171H 192
172H 193
173H 191
181 115 (111, 116, 121, 131, 140, 151, 161, 192)
182 125 (112, 117, 122, 141, 193)
183 135 (113, 120, 133, 150, 160, 191)

115. The Nature and Continuity of Life (N)
Fall, Winter, Spring, Summer. 4(3-2)
A—The development and testing of scientific concepts as examples of man's attempt to understand the world in which he lives. Selected topics from the life sciences illustrate the nature of scientific investigation.
B—Theories of the origin, development and structure of life and the universe of which it is a part. Examination of contemporary problems associated with defining life and death.
C—Consideration of social and ethical issues relating to our increasing control of reproduction and heredity. Reproduction and heredity from molecular, cellular and organismic perspectives, including human structure and function.
D—The nature of living things, contrasting various scientific and non-scientific views. The implications of the modern sciences understanding of life for our beliefs and values.

122. Biocultural Evolution of Man (N)
(1938) Fall, Winter, Spring. 4(3-2)
Man's current understanding of himself and his beliefs as products of biological and cultural evolution. Implications for man's future.

125. Time and Change in Nature (N)
Fall, Winter, Spring, Summer. 4(3-2)
A—Man's attempts to explain the present in terms of past events are explored through selected topics from the life sciences and earth sciences. Stress on the role of controversy in science and the nature of scientific evidence.
B—Heredity, evolution and diversity of life are examined from the viewpoint of the biological and cultural development of the human species. Evolutionary relationships between humans and their environment.
C—The origin and evolution of earth and living things are studied as vital and related problems. Emphasis on problem-solving in science and impact of evolutionary concepts on human societies.

127. The Biocology of Health
Fall, Winter, Spring. 4(3-2)
Man's health examined from evolutionary and ecological viewpoints. Emphasis on the impact of increasingly man-made environment has had on the health of Western man.

129. The Biotechnology of Health
Winter, Spring. 4(3-0)
Survey of the biotechnology currently and potentially available to manage health problems. Social issues associated with this biotechnology.