#### 121. Preview of Military Science

Fall, Winter. 1(1-0) Approval of

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) 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.

#### 223.Terrain Analysis and Land Navigation

Winter, Spring. 3(3-0) 121 and approval of department.

Military maps, map construction, specifications and uses. Includes both a study of aerial photographs and an introduction to remote energy sensors employed by defense agencies as they relate to tactical operations.

#### Military Teaching 324.

Fall, Winter. 4(4-2) 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) 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 depart-

Civilian and military law as they pertain to individuals and organizations associated with the Department of Defense.

#### 427. Seminar

Spring. 1(1-0) Approval of depart-

Precommissioning orientation stressing current military policies, procedures, customs and tends.

### MUSIC

### College of Arts and Letters

#### 094. Band

Summer. Zero credit. Membership determined by audition.

MUS

Attendance at all rehearsals and public concerts obligatory. See Music 117, 118, 318.

### Theory Review

Fall, Summer. 2(3-2) For majors who need theory review.

Basic course in fundamentals and ear training,

#### 112. Chamber Music

Fall, Winter, Spring, Summer. 1(1-0)

#### 118. Band

A. Marching Band.

Fall. 1 credit. May re-enroll for credit. Membership determined by audition.

The Marching Band participates at football

### B. Spartan Brass

Winter, 1 credit, May re-enroll for credit. Membership determined by audition.

The Spartan Brass participates at basketball games.

#### C. Concert Band.

Fall, Winter, Spring. 1 credit. May re-enroll for credit. Membership determined by

Public appearances are scheduled on campus each term.

#### D. Symphonic Band

Fall, Winter, Spring. I credit. May re-enroll for credit. Membership determined by audition. A high level of achievement in performing ability is required.

Concerts are scheduled both on and off campus.

#### 133. Orchestra

Fall, Winter, Spring. 1(0-5) Membership determined by audition.

Standard overtures and symphonies studied and publicly performed. Attendance at all rehearsals and public concerts obligatory.

### Music in Elementary Education Fall, Winter, Spring, Summer. 4(2-3)

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.

Class instruction in piano, voice, violin, cello, clarinet, and cornet.

#### 142. Class Instruments and Voice Winter. 1(0-2) 141.

Continuation of 141. Class instruction in piano, voice, violin, cello, clarinet, and cornet.

#### 143. Class Instruments and Voice

Spring, 1(0-2) 142.

Continuation of 142. Class instruction in piano, voice, violin, cello, clarinet, and cornet.

#### 145. Music Foundations

Fall, Winter, Spring, Summer. 4(3-2) Elementary Education and Physical Education and Recreation majors.

Development of understanding and knowledge of music fundamentals, ear training, and music reading; rhythm and tone problems.

#### 146. Elements of Music

Fall, Winter, Spring. 2(1-2) Physical Education majors.

Understanding of music and rhythm necessary for the accompaniment and recognition of various rhythmic activities which are a part of physical education,

#### 147. Elementary Piano

Fall, Winter, Spring. 2(2-2) 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) 147. Elementary Education majors. Continuation of 147.

#### 150. Keyboard Instruments and Harp

Fall, Winter, Spring, Summer. 1 to 4 credits. To pass entrance examination, students should have all major and harmonic minor scales and arpeggios, and be able to play from memory equivalent of studies from Czerny Op. 299, two-part inventions of Bach, movements from Mozart, Haydn, or Beethoven sonatas, or compositions of equal difficulty.

Instruction in piano, pipe organ, and harp.

Fall, Winter, Spring, Summer. 1 to 3 credits. Some knowledge of piano is recommended. Candidates should possess a voice of good quality, and should show evidence of musicianship. During the entrance examination period (see University calendar) candidates for a major or a minor in voice should be pre-pared to sing three songs for the audition committee that will best show the candidate's vocal possibilities and musical development. Elective candidates need only to possess promising vocal quality and ability to read music.

#### 152.Stringed Instruments

Fall, Winter, Spring, Summer. 2 to 4 Student should have elementary knowledge of piano. Entering majors are expected to display a knowledge of instruments and play two-octave major and minor scales in the more common bowings

Instruction in violin, viola, violoncello, and string

#### 153. Woodwind Instruments

Fall, Winter, Spring, Summer. 2 to 4 credits. Entering majors are expected to display playing knowledge of instrument to include proper voicing tone, knowledge of the less com-plicated alternate fingerings, and ability to play two-octave major and minor scales in the more common articulations.

Instruction in flute, oboe, clarinet, saxophone, and bassoon.

#### 154. Brass Instruments

Fall, Winter, Spring, Summer. 2 to 4 credits. To pass entrance examination in a brass instrument, candidates should be able to meet the following requirements: proper em-bouchure, good tone quality, relatively accurate sense of pitch, rhythmic accuracy, fluent manner of playing, ability to play two-octave major scales in the more common keys, technical exercises equivalent to the major scale studies in the Arban Method, and solos such as Phantasy, Piece, Tuthil, My Regards, Llewellyn, Adagio Cantabile, Beethoven or other solos of equal difficulty.

Instruction in cornet, French horn, trombone, baritone, and tuba.

#### 155. Percussion

Fall, Winter, Spring, Summer. 1 to 4 credits. To pass entrance examination in percussion instruments, candidate must be able to play satisfactorily the twenty-four rudiments.

#### 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 chorale.

### 181. Basic Harmony

Winter. 3(3-1) 180.

Continuation of 180.

### 182. Basic Harmony

Spring. 3(3-1) 181.

Continuation of 181.

## 183. Aural Harmony

Fall, Winter, Spring, Summer. 1(0-2) 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, Summer. 1(0-2) 183; 181 concurrently.

### 185. Aural Harmony

Fall, Winter, Spring, Summer. 1(0-2) 184; 182 concurrently.

### 190. State Singers

Fall, Winter, Spring. 1(0-4) Membership determined by audition; ability to sight read. Three hours of rehearsals a week. Attendance at all rehearsals and public concerts obligatory.

#### 191. Chorus

Fall, Winter, Spring, Summer. 1(0-2½)
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) Membership determined by audition.

Three hours of rehearsals a week. Attendance at all rehearsals and public concerts obligatory.

### 195. Jazz Laboratory Band

Fall, Winter, Spring, Summer. 1(0-4) Membership determined by audition.

Practical experience in playing 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. Approval of department.

# 224. History of Music Fall. 3(3-0) 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) 224.

Baroque and classical periods. Special attention to fugue, opera, oratorio, sonata, and symphony. Analysis of characteristic works.

### 226. History of Music

Spring. 3(3-0) 225.

Romantic period, impressionism, and contemporary trends. Continuation of development of form, melody, rhythm, and tonality. Final examination is comprehensive, covering 224, 225 and 226.

### 241. Advanced Class Piano

Fall. 1(0-2) 143 or approval of department. For School Music Choral majors only. Continuation of Class Piano 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) 241 or approval of department.

Continuation of 241,

### 243. Advanced Class Piano

Spring, 1(0-2) 242 or approval of department.

Continuation of 242.

### 245. Elementary School Music

Fall, Winter, Spring, Summer. 3(3-0) 145 or approval of department. Elementary Education majors.

Continuation of unison and part singing. Methods and materials in elementary school music. Workshop activities to prepare for teaching on levels from nursery school through 8th grade.

### 271. Fundamentals of Music

Fall, Winter, Spring. 3(3-1) Non-majors.

Fundamentals of music to develop understanding and knowledge of scales and modes, key signatures, chord structures, chord progressions and non-harmonic tones.

# 272. Introduction to Music Literature I

Fall, Winter, Spring, Summer. 3(3-0) Non-majors.

An introduction to music in the Western tradition. The elements of musical expression and the techniques of musical analysis in connection with representative musical masterpieces of the Middle Ages, the Renaissance, the Baroque, the period of Classicism and Romanticism, and the twentieth century.

#### 273. Introduction to Music Literature II

Fall, Winter, Spring, Summer. 3(3-0) 272; non-majors.

Continuation of 272. Music of the eighteenth century. Among composers to be studied are: Vivaldi, D. Scarlatti, F. Couperin, Bach, Handel, Haydn and Mozart. Demonstrates the major types and media of composition from the late Baroque to early Romanticism and clarifies the stylistic trends of the time.

### 280. Advanced Harmony

Fall. 3(3-1) 182.

Continuation of 182, with added vocabulary and technique through nineteenth century harmony. Creative writing in small forms.

### 281. Advanced Harmony

Winter. 3(3-1) 280.

Continuation of 280.

# 282. Advanced Harmony

Spring. 3(3-1) 281.

Continuation of 281.

### 283. Advanced Aural Harmony

Fall, Winter, Spring, Summer. 1(0-2) 185; 280 concurrently.

Aural counterpart of advanced harmony. Drill in harmonic, melodic, and rhythmic dictation. Sight singing and keyboard harmony.

### 284. Advanced Aural Harmony

Fall, Winter, Spring, Summer. 1(0-2) 283; 281 concurrently.

### 285. Advanced Aural Harmony

Fall, Winter, Spring, Summer. 1(0-2) 284; 282 concurrently.

### 295. Opera Workshop

Fall, Winter, Spring. 2(0-4) Approval of department.

Repertoire coaching, diction, interpretation. Study and performance of entire operas and excerpts from the standard and contemporary repertoire; production of musicals (with Speech and Theatre Department); TV opera productions on Station WMSB.

### 314. Church Service Playing

Fall, Winter, Spring, Summer. 2(2-0) May re-enroll for a maximum of 6 credits. Three terms of pipe organ.

Instruction in adapting piano and orchestral accompaniment to organ; choosing organ and choir repertoire appropriate to church season; hymn playing, modulation, and ways to help unify service.

### 318. Advanced Band

A. Symphonic Band

Fall, Winter, Spring. 2 credits. May re-enroll for credit. Six terms of 118 and audition.

#### B. Wind Ensemble

Fall, Winter, Spring. 2 credits. May re-enroll for credit. Membership determined by audition. The highest level of performing ability is required.

Full range of wind literature is performed. Public concerts are presented both on and off campus.

### 320. Music Workshop

Summer. 1 to 6 credits. Approval of department.

### 323. Carillon

Fall, Winter, Spring, Summer. 2 credits. May re-enroll for credit. 182; 6 terms of piano and approval of department.

Carillon playing technique, style and interpretation, arranging, adapting composition and improvisation. Survey of ensemble combinations with other instruments. Mechanical aspects of the instrument and bell acoustics. Carillon art and tradition, bell founders, literature and composers.

# 334. Composing and Arranging for Jazz Ensembles

Fall, Winter, Spring, Summer. 3(2-2) May re-enroll for a maximum of 9 credits. 182; approval of department.

Techniques of composition and arranging in jazz idiom for various instrumental and/or vocal ensembles. Analytical studies of scores, recorded examples and published stage band materials. Writing for films and commercials,

## 335. Ensemble and Conducting

Fall, Spring. 3(1-4) 185 or approval of department.

Principles of conducting correlated with application in ensemble of vocal and instrumental class instruction. Survey of vocal and instrumental ensemble literature suitable for school use. Individual conducting stressed.

# 336. Ensemble and Conducting

Winter. 3(1-4) 335.

Continuation of 335.

## 340. Class Instruments

Fall, Winter, Spring, Summer. 1(0-2) May re-enroll 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.

#### 346. Elementary School Music Appreciation

Winter, Spring, Summer. 2(1-2) Elementary Education majors.

For teachers who need better understanding of For teachers who need better understanding of types, forms, and styles of instrumental and vocal compositions. Development of critical judgment of musical works and place of music in modern life. Opportunities to hear records and performances. Study of materials to be used in elementary school.

#### Methods and Literature 347.

Fall. Summer of odd-numbered years. 2(1-2) Six terms of piano or voice or approval of department.

Methods of teaching piano or voice, with study of appropriate teaching repertoire for piano or

#### 348. Methods and Literature

 $Winter. \quad 2(1\text{--}2) \quad \text{Six terms of piano} \\ or \ voice \ or \ approval \ of \ department.$ 

Methods of teaching piano or voice, with study of appropriate teaching repertoire.

#### Methods and Literature 349.

Spring. Summer of even-numbered years. 2(1-2) Six terms of piano or voice or approval of department.

Methods of teaching piano or voice, with study of appropriate teaching repertoire.

# Keyboard Instruments and Harp

Fall, Winter, Spring, Summer. 1 to 4 credits. Six terms of 150 or approval of department.

Continuation of 150. Instruction in piano, organ, and harp.

#### 351. Voice

Fall, Winter, Spring, Summer. 1 to 4 Six terms of 151 or approval of departcredits. ment.

Continuation of 151.

#### 352. Stringed Instruments

Fall, Winter, Spring, Summer. 2 to 4 Six terms of 152 or approval of departcredits. ment.

Continuation of 152. Instruction in violin, viola, violoncello, and string bass.

#### 353. Woodwind Instruments

Fall, Winter, Spring, Summer. 2 to 4 Six terms of 153 or approval of department.

Continuation of 153. Instruction in flute, oboe, clarinet, saxophone, and bassoon.

# Brass Instruments

Fall, Winter, Spring, Summer. 2 to 4 credits. Six terms of 154 or approval of de-

Continuation of 154. Instruction in cornet, French horn, trombone, baritone, and tuba.

#### 355. Percussion

Fall, Winter, Spring, Summer. 1 to 4 credits. Six terms of 155 or approval of depart-

Continuation of 155.

#### 356. Sight Reading at the Piano

Fall, Winter, Spring, Summer. 1 to 2 credits. May re-enroll for a maximum of 6 credits. Three terms of piano.

Establish principles of good sight reading, accompanying and free keyboard harmonization.

Studies in Style and Form Fall, Summer. 2(2-1) 282.

Analysis and creative writing of technical and structural practices in music of various periods, with special emphasis on the twentieth century.

#### Studies in Style and Form 381. Winter, Summer. 2(2-1) 282.

Analysis and creative writing of technical and

structural practices in music of various periods, with special emphasis on the twentieth century.

#### 382. Studies in Style and Form

Spring, Summer. 2(2-1) 282.

Analysis and creative writing of technical and structural practices in music of various periods, with special emphasis on the twentieth century.

#### 383. Orchestration

(380.) Fall, Summer. 2(2-0) 282.

Modern orchestral resources and scoring for various instrumental groups.

#### 384.Orchestration

(381.) Winter, Summer. 2(2-0) 383. Continuation of 383.

### Orchestration

(382.) Spring, Summer. 2(2-0) 384. Continuation of 384.

#### 386. Counterpoint

(380.) Fall, Summer. 2(2-0) 282. Technique of writing tonal counterpoint in

# two, three, and four parts. Counterpoint

(381.) Winter, Summer. 2(2-0) 386. Continuation of 386.

#### 388. Counterpoint

(382.) Spring, Summer. 2(2-0) 387. Continuation of 387.

#### 400. Clinical Training in Music Therapu

Fall, Winter, Spring, Summer, 1 to 18 credits. Music Therapy majors.

Six months internship in an accredited neuropsychiatric hospital.

### 400H. Honors Work

Fall, Winter, Spring, Summer. 1 to 16 credits. Approval of department.

### Music Literature for Children

Summer of even-numbered years. 3(3-0) ED 325A or 325H.

Instructional materials in vocal music for use with children in elementary and junior high schools.

### Opera

Winter of odd-numbered years. 2(1-2) May re-enroll for a maximum of 6 credits. Six terms of voice or approval of department. History of opera from 1600 to the present.

#### 412. Oratorio

Fall of even-numbered years. Summer. 2(1-2) Six terms of voice or approval of department.

History of oratorio from 1600 to the present,

### 415A. Renaissance Music Fall. 2 credits. 182.

415B. 19th Century Music Fall. 2 credits. 182.

### 415C. Keyboard Music, 17th - 18th Century

Fall of even-numbered years. credits. 182.

### 415E. German Lieder

Fall of odd-numbered years, 2 credits.

182.

415F. Organ Literature to 1700

Fall of odd-numbered years. 2 credits.

416A. Baroque Music

182

Winter. 2 credits. 182.

416B. 20th Century Music, European Winter. 2 credits. 182.

416C. Piano Music, 19th Century

Winter of odd-numbered years. 2 credits. 182.

French-Italian Art Song

Winter of even-numbered years. 2 credits.

### 416F. Organ Literature From 1700 to 1900

Winter of even-numbered years. 2 credits. 182.

417A. Classical Music Spring. 2 credits. 182.

417B. 20th Century Music, American Spring. 2 credits. 182.

417C. Piano Music, 20th Century

Spring of odd-numbered years. credits. 182.

417E. English-American Art Song

Spring of even-numbered years. credits.

#### 417F. Organ Literature From 1900 to Present

Spring of even-numbered years. credits. 182.

### 418H. Honors Course in Music Literature

Fall. 3(3-0) or 4(3-0) Music 226 and approval of department.

A tutorial class. Primary emphasis on instru-mental and vocal music 1750-1900, but work may be directed towards the student's special field of interest.

### 419H. Honors Course in Music Literature

Winter. 3(3-0) or 4(3-0) 226 and approval of department, Continuation of 418H.

### 420H. Honors Course in Music Literature

Spring, 3(3-0) or 4(3-0) 226 and approval of department. Continuation of 419H.

#### 421. Music and Worship

Fall. 3(3-0) 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) 226 or approval of department,

Greek and Latin hymns, canticles, and transi-tion 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.

#### Choral Repertoire for the Church 423. 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.

# Preparatory Musicology

Fall. 3(3-0) 226, 282.

A seminar dealing with research in various fields of musicology, including ethno-musicology.

# Preparatory Musicology

Winter, Summer. 3(3-0) 424.

Selected topics in music history from the ancient Greeks to 1600.

#### Preparatory Musicology 426.

Spring. 3(3-0) 425.

One or more broad areas in music history, analysis or aesthetics, chosen after consultation with the

### 429S. Band Materials

Summer. 1(0-2) May re-enroll for credit. Juniors.

Analysis and performance of literature suitable for school bands.

#### Advanced Conducting 433.

Fall. 2(2-0)

Continuation of baton techniques and analysis through study of orchestral and choral works.

# Advanced Conducting

Winter. 2(2-0) 433.

Continuation of 433.

#### Advanced Conducting

Spring, Summer. 2(2-0) 434.

Continuation of 434.

#### 438. Brass and Woodwind Techniques

Summer, 2(1-2) Senior music majors,

Materials and contemporary pedogogical practices of group wind instrumental instruction.

#### 440. Fundamentals of Electronic Music

Fall, Summer. 2(2-0) 382 or approval of department.

Instruction in the use of the Moog designed synthesizer, mixer and recorders.

#### 441. Fundamentals of Electronic Music

Winter, Summer. 2(2-0) 440 or approval of department.

Supervised use of the Moog synthesizer.

#### Creative Composition in 442. Electronic Music

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for maximum of 8 credits. 441 or approval of department. Assigned use of the Electronic Music Studio.

#### 450. Recreational Music

Organization and administration of a community music program for adults; community chorus, orchestra, and band. Nonsymphonic instruments and their use in recreation. Summer camp and playground music. Recreational music as it is organized and used by industries.

### Studio Teaching and Observation Fall. 2(1-2) 347, 348, 349.

Supervised studio teaching in classes and private lessons plus one-hour seminar each week.

### Studio Teaching and Observation Winter. 2(1-2) 462.

Continuation of 462.

#### 464. Studio Teaching and Observation Spring. 2(1-2) 463.

Continuation of 463.

#### 465. Practicum: Sacred Music

Fall, Winter, Spring. 3(0-6) May reenroll for a maximum of 6 credits. 314, 336, 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.

# 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.

#### Music Therapy Techniques 471.

Winter. 3(3-0) 470.

Survey of procedures in music therapy; investigation of the rise of music as a tool in treat-ment of mentally ill, mentally and physically handicapped; introduction to hospital organiza-

### 472. Music Therapy Techniques Spring. 3(3-0) 471. Continuation of 471.

#### 480. Advanced Studies in Style and **Form**

Fall. 2(2-1) 380, 381, 382.

Continuation of 382.

### Advanced Studies in Style and Form

Winter. 2(2-1) 480.

Continuation of 480.

# Advanced Studies in Style and Form

Spring. 2(2-1) 481.

Continuation of 481.

## Composition

Fall, Winter, Spring, Summer. 2(2-0) May re-enroll for a maximum of 6 credits. 282 or approval of department.

Guided projects in creataive writing.

# Psychology of Music

Fall, Summer. 3(3-0) Approval of department. Interdepartmental with and administered by the Psychology Department.

Musical behavior with emphasis on psychological aspects of perception, learning, affective response, and ability. Emphasis on social and cultural influences in forming musical tastes, including mass media music.

# Psychology of Music

Winter, Summer. 3(2-2) PSY 486. Interdepartmental with and administered by the Psychology Department.

Basic research concepts and experimental methods in psychology of music research. Practical training in conducting experimental research of musical behavior.

#### Opera Workshop 495.

Fall, Winter, Spring. 2(0-4) May re-enroll for a maximum of 6 credits. Approval of

Repertoire coaching, diction, interpretation. Study and performance of entire operas and excerpts from the standard and contemporary repertoire; production of musicals with Speech and Theatre Department; TV opera productions on Station

#### 802. Seminar in History of Music

Summer of odd-numbered years, 4(8-2)

Critical study in depth of music literature and performance practices within historical perspective.

#### 803. Seminar in Music Education

Fall, Winter, Spring, Summer. 3 credits. May re-enroll for a maximum of 12 credits. Approval of department.

### Research Problems in Music

Fall, Winter, Spring, Summer. Variable credit.

#### 813. Chamber Music

Fall, Winter, Spring, Summer. 1(1-0) Approval of department.

### Seminar in Chamber Music: 18th Century

Fall, Summer. 2(2-0) Approval of devartment.

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.

#### Seminar in Chamber Music: 817.20th Century

Spring, Summer. 2(2-0) Approval of

Intensive study of selected chamber music works of the 20th century.

#### 820. Music Workshop

Summer. 1 to 6 credits. Approval of department.

#### Research Methods and Materials 824.

Fall, Winter, Summer. 3(3-0)

A critical examination of encyclopedias, indices, and other aids to research.

#### 825. Acoustics for Musicians

Winter. Summer of even-numbered 3(3-0)

Classical theory of sound, stressing its application to musical instruments and the human voice.

#### 830. Sixteenth Century Counterpoint

Fall of even-numbered years, Summer. 3(3-0) 482 or approval of department.

Study and writing of counterpoint based upon the works of Orlando Lasso and Palestrina.

# Sixteenth Century Counterpoint

Winter of odd-numbered years, Summer. 3(3-0) 830.

Continuation of 830.

#### 832. Sixteenth Century Counterpoint

Spring of odd-numbered years, Summer. 3(3-0) 831.

Continuation of 831 to include a study of madrigal counterpoint.

#### Seminar in Composition 834.

Fall, Winter, Spring, Summer. 3(3-0) May re-enroll for credit. 482.

### 840. Pedagogy of Theory

Fall, Summer. 3(3-0) Approval of department.

Music theory treatises and pedagogical practices of historical importance.

### 841. Pedagogy of Theory

Winter, Summer. 3(3-0) 840.

Current literature in the field of music theory and approaches to theory pedagogy.

### 842. Pedagogy of Theory

Spring, Summer. 3(3-0) 841.

Continuation of 841 with emphasis upon new instructional media.

#### 850. Applied Music

Fall, Winter, Spring, Summer. 3 credits for Applied Music majors; 2 credits for others. May re-enroll for credit.

## 852. Choral Technique and Materials

Spring, Summer. 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, Summer. 4(4-0) May re-enroll for a maximum of 8 credits. Approval of department.

An application of analytical procedures to school music repertoire.

### 880. Materials of Music

Fall, Winter, Spring, Summer. 1 to 4 credits. 282.

Correlation of the areas of music theory as a basis for the study of 19th and 20th century music.

### 881. Materials of Music

Fall, Winter, Spring, Summer. 1 to 4 credits. 880.

Continuation of 880.

## 882. Materials of Music

Fall, Winter, Spring, Summer. 1 to 4 credits. 881.

Continuation of 881.

### 899. Research

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

### 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 credits. May re-enroll for credit. 426 or approval of department.

#### 954. Music Supervision

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

# 955. Current Tendencies in Music Education

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

### 960. Analytical Studies in Music Literature

Fall, Summer. 3(3-0) 382 and two years of music literature or approval of department.

Melodic, formal, contrapuntal and harmonic analysis of music from plainsong to contemporary music.

### 961. Analytical Studies in Music Literature

Winter, Summer. 3(3-0) 960.

Continuation of 960.

# 962. Analytical Studies in Music Literature

Spring, Summer. 3(3-0) 961.

Continuation of 961.

### 970. Contrapuntal Techniques

Fall of odd-numbered years, Summer. 3(3-0) 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) 970.

Continuation of 970.

## 972. Contrapuntal Techniques

Spring of even-numbered years, Summer. 3(3-0) 971.

Continuation of 971.

# 980. Seminar in Theory

Fall, Winter, Spring, Summer. 3(3-0) May re-enroll for a maximum of 9 credits. 482 or approval of department.

### 999. Research

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

# NATURAL RESOURCES N R

# College of Agriculture and Natural Resources

### 202. Soils and Man's Environment

Winter. 3(3-0) Interdepartmental with the Resource Development, and Fisheries and Wildlife Departments and Soil Science and administered by Soil Science.

Use of soil and water resources in a technological society as it relates to environmental quality. Nature of pollution problems and their possible solutions. Food production and world population.

#### 475. International Studies in Agriculture and Natural Resources

Summer. 3 to 9 credits. Approval of the college. Interdepartmental with and administered by Agriculture.

Study-travel experience emphasizing contemporary problems affecting agriculture in the world, national, and local communities. Field trips, case studies, interviews with leading experts, government officials, community leaders. Supervised individual study.

# 491. Natural Resources and Modern Society

Spring, Summer. 3(3-0) Juniors. Interdepartmental with the Forestry and the Resource Development Departments and administered by Forestry Department.

A survey of the social and economic significance of natural resources in modern industrial and urban society. Current problems of natural resources management and use are examined in terms of the society in which they exist.

# NATURAL SCIENCE N S

# University College

Alternative approaches or tracks are offered on an optional basis all of which meet the course objectives of 191, 192, 193. These are described briefly below and are designated by letters which are used as part of the course number for registration. No student may receive credit for more than one track within a course (191, 192, 193).

## 181. Natural Science

Fall. 4(2-3) Students may not receive credit in both 181 and 192. Approval of department.

The role of methods in science emphasizing the development and modification of systems of explanation. The nature of the cell and sexual reproduction as background for Mendelian gene theory and its modern modifications. Social implications are emphasized.

### 182. Natural Science

Winter. 4(2-3) Students may not receive credit in both 182 and 193. 181 or approval of department.

Methods in science continued with emphasis on evolutionary ideas regarding the origin of earth features and existing life forms. The origin and development of man is considered along with a number of modern problems.

### 183. Natural Science

Spring. 4(2-3) Students may not receive credit in both 183 and 191. 182 or approval of department.

Nature of sience as exemplified by ideas from Physical Science. The Copernican Revolution is used as an example of the science-society interaction. Modern concepts of the nature of matter are also introduced.

### 191. Natural Science

(183.) Fall, Winter, Spring, Summer. 4(2-3)

- A. The Copernican Revolution, Atomic Theory and Relativity related to man's attempt to find a unified view of nature. Emphasis on effects of science and society on one another.
- B. Man's conception of nature and origin of the universe and social and philosophical implications of his changing views. Consideration of major controversies regarding man's place in the universe.