

Proposed Self-Determined Major: Recording Arts

My interest in music began at a young age. At 7 years old, I began playing piano, and around age 12, left piano in order to pursue the guitar. From the time I started to learn the guitar, I loved to record my friends and I playing. At first, I would use inexpensive tape players to record, and gradually, I began to use simple microphones and computers. In high school, I was in a rock band that produced a full album of original music. While a freshman at Wake Forest, a friend introduced me to a multitrack digital computer program (Cakewalk), and I was fascinated with the possibilities of this technology.

Music has always been a passion of mine, yet I am equally, if not more passionate, about recording music. Through my proposed major, I will be able to, for the first time in my academic career, pursue music in conjunction with a study in the science of sound, electronics, and computers.

The major I have proposed could not be satisfied under the guise of a music major. A music major would not receive the interdisciplinary training in computers, physics, and professional recording that one would through this SDM.

In addition, the Skidmore Music Department states on their web page that their mission is to prepare students “who wish to pursue seriously the fields of performance, composition, musicology and music theory.” Although I find these aspects of music interesting, what I am most passionate about is recording music, which is not part of the Skidmore Music Department mission.

Required Courses

Music

MU 241 Materials and Structures I (4)
MU 242 Materials and Structures II (4)
MU 243 Materials and Structures III (4)*
MU 255 Music Technology I (3)
MU 208 Music and Culture (3)
MU 353 Music Technology II (3)
MU 371 Independent Study, Music Technology (3)
MU 376 Senior Project in Music Technology (3)
MU 399 Professional Internship in Music (Recording) (6)
MU 300 Level Seminar(s) (3)
MP 281 Private Musical Instruction (2)*
MP 282 Private Musical Instruction (2)*
MP 351 Private Musical Instruction (2)*
MU 101 Introduction to Western Music (3) (Wake Forest)

Math

MA 111 Calculus I (4) (Wake Forest)

(PD's Proposal)

MA 113 Calculus II (4)

Physics

PY 108 Sound and Music (3)

PY 251 Special Topics in Physics: Acoustics (3)

PY 213 Electronics (3)*

PY 351 Advanced Topics in Physics: Acoustics (3)

Computer Science

CS 106 Introduction to Computer Science (4)*

Psychology

PS 325 Perception*

*These courses would be optional. They would not be required for graduation in that they are not imperative to the field of music recording. However, knowledge of these subjects would be helpful.

Tentative Schedule

Spring 05

PY 108 (3)

MU 208 (4)

MU 241 (3)

MU 353 (3)

MA 113 (4)

Summer 05

MU 399 (6)

Fall 05

MU 242 (4)

PY 251 (3)

MU 371 (3)

MP 281 (2)

MU 300 (3)

Spring 06

MU 243 (4)

(PD's Proposal)

PY 351 (3)

PY 213 (3) or CS 106 (4)

MU 376 (3)

MP 282 (2)

Course Descriptions

MU 241 Materials and Structures I

Following a brief review of the rudiments of pitch, rhythm, and meter, students will study the principles of species counterpoint and then proceed to write and analyze diatonic tonal harmony, with reference to musical literature, style, form, and compositional process. Diatonic tonal syntax is the foundation of Western art music from the 17th through the 19th centuries, as well as some jazz and popular music up to the present time. Examples will be chosen from a wide range of historical periods, musical styles, and traditions. (Fulfills humanities requirement.) *Prerequisite:* Placement exam or MU101.

MU242 Materials and Structures II

The second semester of theory will continue with the addition of chromatic harmony and the literature, style, forms, and compositional procedures associated with these expanded harmonic techniques, which appear in Western art music from the 18th to at least the early 20th centuries, and jazz. Topics will include chromatic chords, the resurgence of linear contrapuntal processes, modulation, and techniques that pushed to and beyond the limits of tonal harmony, such as expanded tertian chords, linear chromaticism, and finally the symmetrical scales and interval patterns associated with the dissolution of functional tonality. *Prerequisite:* MU152 or MU241.

MU 243 Materials and Structures III

This semester will introduce students to the compositional and analytical procedures of the 20th and 21st centuries. Topics will include the set-theoretical experiments of the atonal period, the 12-tone serialism of the mid-20th century, and the wide variety of influences (folk music, non-Western musics, jazz, and popular musics, as well as ongoing points of influence and connection from the harmony and counterpoint of Western art music) adopted by composers during these years. Students will develop systematic, critical approaches to the range of contemporary musical styles and possibilities as they choose their own musical pathways. *Prerequisite:* MU242 or MU251.

MU 255 Music Technology I

Introduction to basic music technology, electronic music, and professional recording studio techniques and equipment. Study of elementary acoustics, MIDI, synthesizers, microphones, analog and digital multitrack recording, sound mixing, and processing. Introduction to works in various styles by established electronic composers. Weekly studio/lab work. *Prerequisites:* ability to read music and QR1. (Fulfills QR2 requirement.)

MU 208 Music and Culture

(PD's Proposal)

An intercultural introduction to music as culture. Topics include voice types, instrument categorizations, pitch and time systems, musical structure, transcription/notation, and ethnography. *Prerequisite:* MU151 or MU241 (or current enrollment in MU151 or MU241) or permission of instructor. (Fulfills humanities requirement; meets expository writing requirement for students who placed at EN105 level or who have completed EN103.)

MU 353 Music Technology II

Development of original compositions using advanced studio techniques. Areas of study include advanced MIDI projects, computer algorithms for composition and sound synthesis, synthesizer programming, audio (SMPTE) and video (VITC) time code synchronization, digital sampling, digital multitrack recording, automated digital mixing, digital mastering for compact disk, and audio for video. Study of works in various styles by established electronic composers. Weekly studio/lab work. *Prerequisite:* MU255 or permission of instructor.

MU 371 Independent Study In Music Technology

Advanced studies in multitrack digital recording and mastering in Protocols, Digital Performer, and DSP mastering techniques.

MU 376 Senior Project in Music Technology

The creation of a full digital recording of entirely original music.

MU 399 Professional Internship in Music (Recording)

An internship in a professional recording studio.

MP 281, 282, 351

Individual forty-five-minute weekly instruction in voice, piano, harpsichord, organ, fortepiano, guitar, orchestral instruments, sitar, tabla, and jazz improvisation. Prospective students accepted by audition /interview

MU 101 Introduction to Western Music

Introduction to Western Music. (3h) Basic theoretical concepts and musical terminology. Survey of musical styles, composers, and selected works from the Middle Ages through the present day

MA 111 Calculus I

Derivatives, integrals and their applications. Techniques of differentiation. Integration and differentiation of exponential, logarithmic and trigonometric functions. *Prerequisite:* high school preparation including trigonometry or consent of department. (Fulfills QR2 requirement.)

MA 113 Calculus II

Inverse trigonometric functions and hyperbolic functions. Systematic study of integration. Series and Taylor series. Polar coordinates. Indeterminate forms, L'Hôpital's

(PD's Proposal)

rule and improper integrals. *Prerequisite:* MA111 or consent of department. (Fulfills QR2 requirement.)

PY 108 Sound and Music

The physical principles of sound—how it is produced, propagated, and perceived. Illumination of principles will emphasize examples from music. Mechanisms used to produce different types of musical sounds will be discussed as well as the physical principles behind the reproduction of music in its many forms such as radio, tape recorders, and CD players. (Fulfills QR2 requirement.)

PY 251 Special Topics in Physics: Acoustics

PY 213 Electronics

An introduction to solid-state electronics. Discrete circuit elements and integrated circuits are discussed and employed in both digital and analog applications. Circuit analysis, amplifiers, signal processing, logical networks, and practical instrumentation are studied. *Prerequisite:* PY210.

PY 351 Advanced topics in Physics: Acoustics

CS 106 Introduction to Computer Science

An introduction to the principles of design, implementation, and testing of object-oriented programs. The course covers language features such as control structures, classes, file I/O, and basic data structures including arrays. Other topics include recursion and fundamental algorithms, such as elementary searching and sorting algorithms. (Fulfills QR2 requirement.)

PS 325 Perception

The study of the way in which people use sensory input to identify and interpret information in the world. The course will examine contributions of sensory, neural, and cognitive factors to perceptual experience. Discussions will cover general perceptual principles, but will emphasize visual and auditory processes.

Prerequisite: PS101