MUTK-MUSIC TECHNOLOGY

MUTK 4113   Understanding Electroacoustic Music   3 Credit Hours
(Slashlisted with MUTK 5113) Prerequisite: Sophomore standing. A course on Electroacoustic music techniques, history, aesthetics, and literature. Students will improve their role as active listeners by observing the ways we listen to music, speculate on the role of technology in creating new music, consider the aesthetic intentions of seminal experimental composers, and study their compositions using various analytical systems. No student may earn credit for both 4113 and 5113. (Irreg.) [IV-AF] .

MUTK 4133   Introduction to Digital Signal Processing   3 Credit Hours
(Slashlisted with MUTK 5133) Prerequisite: Sophomore standing and permission of instructor. Students will be familiarized with the theory of Digital Audio and various Digital Signal Processing applications. Cycling 74's Max, an object-oriented programming environment for music applications, known for its real-time audio functions, will be the preferred software for the term. Students will complete weekly creative & programming assignments. A final and original creative project will be required. No student may earn credit for both 4133 and 5133. (Irreg.)

MUTK 4143   Advanced Digital Signal Processing   3 Credit Hours
Prerequisite: 4133. Advanced methods and theories of digital audio and digital signal processing applications. (Irreg.)

MUTK 4163   Real Time MIDI Control   3 Credit Hours
Prerequisite: 4133 and sophomore, junior, or senior standing. An introduction to the real-time MIDI control and various MIDI processing applications through reading, listening, and composing. (Irreg.)

MUTK 4173   Recording Techniques   3 Credit Hours
Prerequisite: 4183 and junior or senior standing. Provides an understanding to the fundamentals of recording techniques and studio procedures. (Irreg.)

MUTK 4183   Sound Design   3 Credit Hours
Prerequisite: sophomore, junior, or senior standing. A course designed to expand ones knowledge of MIDI sequencing, software-hardware synthesizers, and digital audio editing. (Irreg.)

MUTK 4193   Producing, Mixing, & Mastering   3 Credit Hours
Prerequisite: Junior standing; MUTK 4173 and MUTK 4183. This course gives students the opportunity to learn the practical skills involved in producing, mixing, and mastering a music recording. Students will also apply appropriate skills for mix-down and editing, and learn recording studio etiquette and final deliverable expectations for album distribution. (Sp)

MUTK 4960   Directed Readings   1-4 Credit Hours
1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)

MUTK 4970   Undergraduate Seminar   1-3 Credit Hours
Prerequisite: sophomore standing. 1 to 3 hours. May be repeated with change with change of content; maximum credit nine hours. In depth look at advanced topics of various fields of electroacoustic music. (Irreg.)

MUTK 4990   Independent Study   1-3 Credit Hours
1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)

MUTK 5113   Understanding Electroacoustic Music   3 Credit Hours
(Slashlisted with MUTK 4113) Prerequisite: Graduate standing and departmental permission. A course on Electroacoustic music techniques, history, aesthetics, and literature. Students will improve their role as active listeners by observing the ways we listen to music, speculate on the role of technology in creating new music, consider the aesthetic intentions of seminal experimental composers, and study their compositions using various analytical systems. No student may earn credit for both 4113 and 5113. (Irreg.)

MUTK 5133   Introduction to Digital Signal Processing   3 Credit Hours
(Slashlisted with MUTK 4133) Prerequisite: Graduate standing and departmental permission. Students will be familiarized with the theory of Digital Audio and various Digital Signal Processing applications. Cycling 74's Max, an object-oriented programming environment for music applications, known for its real-time audio functions, will be the preferred software for the term. Students will complete weekly creative & programming assignments. A final and original creative project will be required. No student may earn credit for both 4133 and 5133. (Irreg.)

MUTK 5143   Advanced Digital Signal Processing   3 Credit Hours
Prerequisite: Graduate standing and departmental permission. Students will expand their knowledge and understanding of the theory and music applications of Digital Signal Processing through reading and programming in Cycling74's Max. Students will demonstrate their understanding of the topics discussed in class through weekly creative assignments and presentations. An original music composition will be presented at the end of the semester. (Irreg.)

MUTK 5153   Interactive Performance Techniques   3 Credit Hours
Prerequisite: Graduate standing and departmental permission. Students will expand their knowledge and practice of the techniques used in composition of live electronics and interactive performance, through weekly readings, listening and analyzing interactive music, and completing programming assignments in Cycling74 Max. An original creative project such as a composition for a solo performer and computer interaction will be required. (Irreg.)

MUTK 5163   Real Time MIDI Control   3 Credit Hours
Prerequisite: Graduate standing and departmental permission. Students will study in depth advanced techniques of Real time MIDI control in Cycling74's Max programming environment, through readings, listening, analysis of related compositions, completing weekly programming assignments, and composing an improvisation environment that they will demonstrate as a group. (Irreg.)

MUTK 5173   Recording Techniques   3 Credit Hours
Prerequisite: Graduate standing and departmental permission. This course aims to familiarize students with specialized recording techniques and studio procedures. This is a hands-on class with emphasis on acquiring skills via intensive practice. The students will be required to demonstrate their understanding of the materials through the successful completion of creative assignments using the recording music studio software-hardware. (Irreg.)

MUTK 5183   Sound Design   3 Credit Hours
Prerequisite: Graduate standing and departmental permission. Sound Design is a hands-on graduate class with emphasis on creative practice of sound manipulation. It aims to offer to the students an in-depth examination of specialized techniques divided in two major areas of interest: MIDI Sequencing and Digital Audio Editing. Students will demonstrate their understanding of the materials through the composition of creative assignments using the MIDI lab software-hardware. (Irreg.)

MUTK 5193   Seminar in Electroacoustic Music   3 Credit Hours
Prerequisite: Graduate standing and departmental permission. The goal of the course is to extend and deepen the students' knowledge of electroacoustic music through its contemporary discourse, such as aesthetics, analytical systems, notation, terminology, genres & categories, recent repertory, and technical fields, such as DSP, DVP, Sensors/Actuators, etc. The students and instructor will decide the list of topics for study in according to their creative interests. (Irreg.)