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Spring 2-1-2007

### MUS 170.00: Introduction to Music Technology - Digital Audio and Multitracking

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MUS U 170, Introduction to Music Technology: Digital Audio and Multitracking, 2 credits  
Spring 2007

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Schedule:

Class meets Mondays and Wednesdays from 2:10 - 3:00 pm, for Section 1, and Tuesdays and Thursdays from 11:10 am - 12:00 pm, for Section 2, in the Lab, room 202.

The Final Exam is scheduled for Tuesday, May 8 at 3:20 - 5:20 pm, for Section 1, and Wednesday, May 9 at 8:00 - 10:00 am, in the Lab.

Lab time will be available Mondays-Thursdays from 6:00-10:00 pm, and Sundays from 1:00-5:00 pm, for weeks 2-14, in the Lab.

Office hours are Monday-Wednesday at 3:10-4:00 pm in my office, room 214.

Description:

MUS 170 is an introductory course in computer music composition, a project-based class that covers the theory and application of digital audio recording, processing, multitracking, mixing, and spatialization, using Peak and Digital Performer software.

The process of composing with recorded sound will be discussed, software will be demonstrated, and recordings of representative pieces will be presented for study, in class. Students are expected to discuss the current topic, practice using the software, and take notes on their observations, during class. Students are also required to read about the composers presented in class, and listen to the recordings posted online, outside of class.

Each student will produce Midterm Project and Final Project pieces, meant to promote an understanding of the computer music techniques studied, as well as the software demonstrated in class, through creative experimentation. Work on the Midterm and Final Projects must be done in the Workstation and Lab. Work done in home studios will not be accepted. Students will also take two Quizzes about the life and music of the composers studied, in order to foster a deeper understanding of the computer music history covered in class. The Final Exam will be a written essay test, covering topics presented in lectures, and will include identification of software tools.

The required texts, web pages about composers and their work, are meant to inspire composition of the Midterm and Final Projects, and aid preparation for the Quizzes.

## Materials:

The reading assignments can be accessed online.

Each student will need CD-R(W) media, for handing in assignments and backing up files. Each student should regularly backup their work from the hard disks on the computers in the Lab and Workstation. CD-R(W) media can be purchased from the Bookstore.

## Grades:

The Midterm Project and Final Project will each count as 30% of the final grade, and will be graded on creative effort and demonstrated technical understanding. The Quizzes will each count as 10% of the grade, and the Final Exam will count as 20% of your final grade.

Attendance is mandatory, and excessive absences will be reflected in your final grade. In addition, each student will be required to attend the Composers Showcase concerts on April 9-10, and the Contemporary Chamber Players concert on April 17.

Extra credit may be added, changes may be made to the requirements of the course, and classes may be added, which will be optional, to benefit the students. Students with disabilities or special needs should talk with the instructor about their needs.

## Calendar:

Week 1	Class overview, facilities
Week 2	Peak: soundfiles, windows, recording
Week 3	Peak: digital audio editing
Week 4	Peak: digital signal processing, plug-ins
Week 5	Digital Performer: projects, windows, importing
Week 6	Digital Performer: mixing, spatialization
Week 7	Midterm Project presentations
Week 8	Midterm Project revision presentations
Week 9	Peak: digital signal processing, plug-ins
Week 10	Peak: digital signal processing, plug-ins
Week 11	Digital Performer: digital signal processing, plug-ins
Week 12	Digital Performer: digital signal processing, plug-ins
Week 13	Digital Performer: automation
Week 14	Final Project presentations
Week 15	Final Project revision presentations
Week 16	Final Exam

## Academic Misconduct and the Student Conduct Code:

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at [www.umn.edu/SA/VP/SA/Index.cfm/page/1321](http://www.umn.edu/SA/VP/SA/Index.cfm/page/1321).