

025:250 COMPOSITION: ELECTRONIC MEDIA I

Prof. Lawrence Fritts
335-1666
lawrence-fritts@uiowa.edu
Fall 2000

Staff: Michael Cash at mscash@blue.weeg.uiowa.edu
John Ritz at jritz@blue.weeg.uiowa.edu

Course Description: Computer music composition is a rapidly growing field, with new possibilities, technologies, approaches, styles, and aesthetics evolving at an unprecedented rate. This course will provide students with a hands-on introduction to the newest developments in computer music, including acousmatic composition, spectral analysis techniques, realtime interaction, and algorithmic techniques. Students will compose individual works with state-of-the-art hardware and software systems, including Pro Tools, Kyma, and Cecilia/CSound.

Grading: Grades are based on participation (10%), composition presentations (20%), and the final composition (70%).

Final Composition: The final composition will be a ca. 5' piece for stereo digital tape. Students will present working versions of the piece during class throughout the semester.

Studio Access: Students will be assigned keys to Studios 1, 2, and 3. Schedules are posted outside each studio door. To receive keys, email Mike Cash at mscash@blue.weeg.uiowa.edu. Give your name, local and permanent addresses, phone, and SS number.

Studio Maintenance: The studios should be kept clean at all times. Food and open drinks should not be consumed in the studios. Bottled drinks should be carefully handled.

Studio Problems: Please report any problems to John and Mike as soon as they occur.

Studio Disk Storage: Students may keep copies of their work on any EMS User drive. However, this data will not be protected and could be accidentally erased or altered. Students should back up all of their work on removeable media, discussed below.

Materials: Students will receive free CDs containing pre-recorded sounds and online manuals. Students should purchase their own blank media for backup: Zip disks, 100 MB at \$8 each; CDs, 650 MB at \$1 each, and DVD Ram disks, 4.9 GB at \$30 each.

Faculty Travel: In order to present research and creative work in their fields, university faculty regularly travel to conferences and festivals. From Aug. 21 to Sept. 10, I will be attending or participating in the International Festival d'Arts Acousmatique near Lyon, France, the International Computer Music Conference in Berlin, and the International Conference on Musical Informatics near Rome, where I will also spend several days mastering a CD of my new works. During my absence, Prof. Amelia Kaplan will supervise class and will be assisted by John Ritz and Mike Cash. Prof. Kaplan will teach acoustics and sound analysis and will handle all problems related to course registration. Mike and John will teach Pro Tools and oversee all studio-related problems, including access and scheduling.

Calendar Note: Pro Tools Readings are for Pro Tools LE Systems running on a Macintosh, not Pro Tools III, TDM systems, or Windows machines. Specialized topics like MIDI, groups, submixing, multiple-track recording, and synchronization do not need to be read for this course.

Aug. 21 Topics: Intro to Studios, Power up, Disk Storage, Pro Tools

Read: Chapter 2. Pro Tools System Configurations	
Pro Tools LE Systems	7
Pro Tools LE System Capabilities	7
Chapter 3. Pro Tools Concepts.	
Hard Disk Recording	9
The Digidesign Audio Engine	9
Elements of a Session	10

Aug. 23 Topics: Pro Tools Edit Window, Creating Sessions, Listening to new computer music works.

Read: Chapter 4. Pro Tools Windows	
The Edit Window	23
Chapter 5. Creating Sessions	
Creating a New Session	42
Opening a Session	45
Saving a Session	46
Creating Custom Session Templates	48
Closing a Session	50
Quitting a Session	50

Aug. 28 Topics: Working with Tracks, Importing Audio, Basic Acoustics (Sound waves, Frequency/Pitch)

Read: Chapter 6. Working with Tracks	
Creating Tracks	51
Hiding Tracks	52
Soloing and Muting Tracks .	60
Chapter 12. Importing/Exporting Audio and MIDI	
Importing Audio	119
Importing Audio into a Session (Macintosh)	119
Importing Audio into a Session (Windows)	122
Recalculating Waveform Overviews	125
Loading Audio Files with Drag & Drop	125
Transferring Audio from CD	125

Aug. 30 Topics: Editing, Playing, Plug-ins, Acoustics (Fourier synthesis)

Read: Chapter 13. Editing Basics	
Pro Tools Editing	133
Track Material.	134
Displaying Region Names and Times	137
Audio Regions and Waveforms.	137
Playlists	141
The Audio and MIDI Regions Lists.	143
Edit Modes	145
Zooming.	147
Rulers	149
Time Scale	150
Chapter 14. Playing/Selecting Track Material	
Playing Tracks	155
Scrolling Options	157
Selecting Track Material	162
Playing Selections	170
Digidesign Plug-Ins Guide:	
Chapter 3. Working With AudioSuite Plug-Ins	
The AudioSuite Window	17
Using AudioSuite Plug-Ins	23

Sept. 4 NO CLASS

Sept. 6 Topics: Regions, Automation, Mixdown, Acoustics (sound analysis)

Read: Chapter 15. Working with Regions and Selections	
Creating New Regions.	175
Placing Regions in Tracks	178
Moving Regions	182
Muting/Unmuting Regions	190
Edit Commands	190
Chapter 21. Automation	
Automation Modes	288
Viewing Automation	293
Drawing Automation	300
Editing Automation	301
Chapter 22. Mixdown and Mastering	
Bouncing Tracks to Disk	313
Bounce Parameters	314
Output Options	315

