

Composition of Electroacoustic Music (MUC 4401 & 6444)

University of Florida Spring 2020

Dr. Scott Lee - scott.lee@ufl.edu

M/W/F 11:45-12:35 PM, MUB 0147

Office: MUB 333 Office Phone: (352) 273-3144

Office Hours: TBD

How to get in touch with me:

For short questions: E-mail me. As a general rule, I answer e-mails between 9:00-5:00, and I try to answer emails within 24 hours of receipt, except on weekends.

For everything else: Come to office hours or make an appointment. Office hours are a chance for you to get help on assignments, go over material covered in class, talk about connections between class material and other ideas, and so on. I strongly encourage you to take advantage of this time.

Course Description and Goals:

An introduction to computer music using the visual programming environment Max (formerly Max/MSP), through tutorials, guided exercises, in-class instruction, assignments, and two composition projects. Students will gain proficiency in a number of topics, including MIDI sequencing, generative and algorithmic composition, digital signal processing, synthesis, and interactive computer performance. Students will also discover repertoire through the creation of a listening list over the course of the semester.

Required Course Materials

A licensed copy of Max 8 on personal computer. Available at <https://cycling74.com>

Begin with the 30 day trial, then either purchase a \$250 permanent academic license (recommended, comes with \$99 upgrades to future versions) or the \$59 annual academic subscription.

Optional Course Textbooks:

Cipriani, Alessandro and Maurizio Giri. *Electronic Music and Sound Design: Theory and Practice with Max 7 – Volume 1 (4th Edition)*. Rome: Contemponet, 2019.

Roads, Curtis. *The Computer Music Tutorial*. Cambridge: MIT Press, 1996. (UF Library: MT56 .R6 1996)

Other Course Materials

Access to a digital audio workstation (Each computer in the lab has Logic Pro.)

Headphones

USB Flash Drive

Attendance

Students are expected to attend all regularly scheduled classes. Each unexcused absence over three will result in a one-point deduction from your final grade. Any student with eight or more unexcused absences will fail the course. An excused absence is an approved UF event, a family emergency, or an illness documented by a doctor's note (to be presented in the first class attended after your sickness). Students knowing in advance that they will miss a class must contact me **beforehand via email**. Please do not schedule non-urgent doctor's appointments during class time. In the case of an

absence (excused or unexcused), that student is responsible for determining what material was covered, and what assignments were given.

Tardy Policy

Attendance will be taken at the beginning of class. Students who are not present when I take attendance will be marked as tardy. Three tardies will count as one unexcused absence. There are no excused tardies.

Evaluation:

Students will be evaluated by participation & preparation, projects, papers, and presentations.

Participation & Preparation:	10%
Listening List:	10%
Assignments:	40%
Midterm Project:	20%
Final Project:	20%

Scale:

A = 93-100 / A- = 90-92 / B+ = 87-89 / B = 83-86 / B- = 80-82 / C+ = 77-79 / C = 73-76 C- = 70-72 / D+ = 67-69 / D = 66-65 / D- = 63-64 / E = 0-62

UF Student Honor Code

You are required to abide by the Student Honor Code. Any violation of the academic integrity expected of you will result in a minimum academic sanction of a failing grade on the assignment or assessment. Any alleged violations of the Student Honor Code will result in a referral to Student Conduct and Conflict Resolution. Please review the Student Honor Code and Student Conduct Code at <http://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

Technology Policy:

Your attention is your most valuable asset; use it to the best of your ability. I reserve the right to dock your grade and/or ask you to leave class if you are inappropriately using technology in class.

Homework Policy:

You are expected to complete assigned tutorials (see class schedule below) before the class periods for which they are assigned. Assignments will be given either in class or via Canvas and must be completed on time. Students must come to class with assignments on their computers and be prepared to present them in class. If you are unable to fully participate in class because you failed to complete the assignments or tutorials for a given day, your grade in the class will be adjusted accordingly.

Listening List:

Over the course of the semester, students will create an annotated listening list of 10 pieces, performances, installations, interactive performance patches, etc. that use Max or live/interactive electronics. The pieces should be of personal interest to the students, and students will submit their list and present their favorites to the class on April 13th.

Digital Resources

We will make use of Canvas for communication and assignments <https://ufl.instructure.com/>
Please check it frequently.

Max Resources:

Cycling '74: <https://cycling74.com>

Max Objects Database: <http://www.maxobjects.com/>

Software Max and MSP Patch Libraries:

[http://www.chikachikabowbow.com/Music/Computers/Software/Max and MSP/Patch Libraries/](http://www.chikachikabowbow.com/Music/Computers/Software/Max_and_MSP/Patch_Libraries/)

Real Time Composition Library: <http://www.essl.at/works/rtc.html>

Students Requesting Accommodations due to Disabilities

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. To request classroom accommodations, contact the Assistant Dean of Students/Director of the Disability Resources Program at P202 Peabody Hall or call 392-1261 (V), 392-3008 (TDD).

Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Schedule below (subject to change)

Class	Date	Day	Unit	Topic	Tutorials
1	1/6	Mon	Max Basics	Intro: Course Overview, Navigating Max, Help Files, Resources	
2	1/8	Wed		Intro to Max Programming: Objects, Messages, Patching, and Printing	Tutorials 1-2
3	1/10	Fri		Data Types: Numbers, Lists, and Math, Basic Scaling	Tutorials 3 & 6
4	1/13	Mon		Order of Operations, Hot and Cold Inlets, Inspector, Metro & Toggle	Tutorials 4-5
5	1/15	Wed		Numerical User Interfaces, Keyboard and Mouse Input, Gates/Switches	Tutorials 7, 8, & 21
6	1/17	Fri		Lab	
7	1/22	Mon		Drawing/Random Generators	Tutorials 9-10
8	1/24	Wed		Procedural Drawing/Lab	Tutorial 11
9	1/27	Mon	MIDI & Generative	Intro to MIDI & MIDI Controllers	MIDI 1-2
10	1/29	Wed	Composition	MIDI Sequencing and Data Storage	MIDI 3-5
11	1/31	Fri		Lab	
12	2/3	Mon		Time in Max/Logic Functions	Tutorial 19
13	2/5	Wed		More Timing	
14	2/7	Fri		Lab	
15	2/10	Mon		List Processing and Sorting	Data Tutorials 1 & 5
16	2/12	Wed		Probability	Tutorial 17
17	2/14	Fri		Lab	
18	2/17	Mon		Routing and Data Storage	Tutorial 18
19	2/19	Wed		Routing and Data Storage continued	Tutorial 16
20	2/21	Fri		Lab - Midterm Presentations	
21	2/24	Mon	Digital Signal	Intro to MSP - Digital Audio and Signal Processing	MSP Basic Tutorials 1-2
22	2/26	Wed	Processing	Intro to MSP Continued	MSP Basic Tutorials 3-4
23	2/28	Fri		Lab	
24	3/9	Mon		Additive and Modulation Synthesis	Synthesis Tutorials 1-3

25	3/11	Wed		Additive and Modulation Synthesis Continued	Synthesis Tutorials 4-5
26	3/13	Fri		Lab	
27	3/16	Mon		Samplers	Sampling Tutorials 1-3
28	3/18	Wed		Samplers Continued	Sampling Tutorials 4-6
29	3/20	Fri		Lab	
30	3/23	Mon		Filters	Filter Tutorials 1-4
31	3/25	Wed		Delays	Delay Tutorials 1-3
32	3/27	Fri		Lab	
33	3/30	Mon		MIDI and MSP	MIDI and MSP 1-3
34	4/1	Wed		Polyphony and Granular Synthesis	Polyphony Tutorials 1-2
35	4/3	Fri		Lab	
36	4/6	Mon	Advanced	3rd Party Plugins & Max for Live Objects	MSP Plugin Tutorials 1-3
37	4/8	Wed	Applications	Score Following	
38	4/10	Fri		Lab	
39	4/13	Mon		Listening-List Presentations	
40	4/15	Wed		External Controllers	
41	4/17	Fri		Lab	
42	4/20	Mon		Advanced Patch Architecture and Organization	Tutorial 15
43	4/22	Wed		Advanced Patch Architecture and Organization	Patr Tutorial 1
Exam	4/30			Final Project Presentations	