

Fall 2018  
MUC 4313/5315

M,W,F – 11:45-12:35pm, MUB 147  
—syllabus subject to change

## Introduction to Electroacoustic Music

Instructor: Dr. Andrew Babcock  
Office: MUB 221  
Office hours: M,W,F – 12:50-1:40 pm, or happily by appointment  
Email: ababcock@arts.ufl.edu (\*best way to contact me)

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### Course Description:

An introduction to electroacoustic music, including a survey of historical background, repertoire, analog and digital technologies, acoustics/psychoacoustics, electroacoustic ear training, and compositional/engineering techniques as applied to the creation of new electroacoustic works.

### Course Objectives:

Students will gain command over significant electroacoustic works and styles of the last 90 years, including their cultural context and use of emerging technologies. Students will develop critical listening skills that can be applied to both the analysis of works and the craft of electroacoustic composition. Finally, students will complete various composition projects designed to integrate creative approaches and signal processing techniques using a digital audio workstation.

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### Prerequisite:

Open to music composition majors at the undergraduate and graduate levels or through permission of the instructor.

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### Required Text:

Holmes, Thom. *Electronic and Experimental Music: Technology, Music, and Culture, 5th Edition*. New York: Routledge, 2016.

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### Course Materials:

- Access to a digital audio workstation such as Reaper, Ableton Live, Logic Audio, Pro Tools, Cubase, Digital Performer, etc. (Reaper is on the computers in MUB 147).
  - Pair of headphones
  - USB flash drive
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### Optional Text:

Roads, Curtis. *Composing Electronic Music: A New Aesthetic*. New York: Oxford University Press, 2015.

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### Assignments and Projects:

There will be weekly reading assignments, 3 small composition projects, 4 listening quizzes, a mid-term exam, a final exam, and a final composition project. Students are expected to complete all reading and composition assignments on time and be able to discuss the material in-class on the dates they are due.

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### Grade Distribution:

Attendance/Participation/Preparation: 15%  
3 Small Composition Projects: 15%  
4 Listening Quizzes: 15%  
Midterm Exam (*written and listening*): 15%  
Final Exam (*cumulative – written and listening*): 20%  
Final Composition Project: 20%

Grades on projects and assignments are based on the following scale:

A = 93–100%	B = 83–86%	C = 73–76%	D = 63–66%
A- = 90–92%	B- = 80–82%	C- = 70–72%	D- = 60–62%
B+ = 87–89%	C+ = 77–79%	D+ = 67–69%	E = below 60%

Information on current UF grading policies for assigning grade points:

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

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## Course Schedule (tentative and subject to change)

### Week 1

W Aug. 22 Introduction, Course Overview, Review Syllabus

F Aug. 24 Studio Workshop

### Week 2

M Aug. 27 Electronic Music Before 1945  
(Holmes – pp. 3-17, Russolo – “The Art of Noise”)

W Aug. 29 Electronic Music Before 1945 (cont.) /  
Simple Vibrating Systems  
(Holmes – pp. 17-41)

F Aug. 31 Studio Workshop

### Week 3

M Sep. 3 \*Holiday – No Class\*

W Sep. 5 Early Electronic Music in Europe  
(Holmes – pp. 41-71)

F Sep. 7 Studio Workshop

### Week 4

M Sep. 10 Electronic Music in Early Europe (cont.)  
(Holmes, pp. 71-102)

W Sep. 12 Early Electronic Music in the USA and Latin America /  
Waves and Wave Propagation  
(Holmes, pp. 103-124)

F Sep. 14 Studio Workshop

### Week 5

M Sep. 17 Early Electronic Music in the USA and Latin America (cont.)  
(Holmes, pp. 124-147)

W Sep. 19 Early Electronic Music in Asia and Oceania  
(Holmes, pp. 149-165)  
**\*\*Listening Quiz #1\*\***

F Sep. 21 Studio Workshop

### Week 6

M Sep. 24 Tape Composition and Electronic Music Fundamentals /  
Complex Vibrations and Resonance  
(Holmes, pp. 168-190)

W Sep. 26	Early Synthesizers and Experimenters (Holmes, pp. 191-217)
F Sep. 28	Studio Workshop
<u>Week 7</u>	
M Oct. 1	Principles of Analog Synthesis and Voltage Control (Holmes, pp. 221-236)
W Oct. 3	Principles of Analog Synthesis and Voltage Control (cont.) / Intensity and Loudness Levels (Holmes, pp. 236-254)
F Oct. 5	Studio Workshop <b>**Small Composition Project #1 Due**</b>
<u>Week 8</u>	
M Oct. 8	The Voltage Controlled Synthesizer (Holmes, pp. 255-272)
W Oct. 10	The Voltage Controlled Synthesizer (cont.) / (Holmes, pp. 272-287) <b>**Listening Quiz #2**</b>
F Oct. 12	Studio Workshop
<u>Week 9</u>	
M Oct. 15	Early Computer Music (Holmes, pp. 290-313)
W Oct. 17	The Microprocessor Revolution (Holmes – pp. 314-337)
F Oct. 19	Studio Workshop <b>**Small Composition Project #2 Due**</b>
<u>Week 10</u>	
M Oct. 22	Exam Review/ Listening Session
W Oct. 24	<b>**Mid-Term Exam (written and listening)**</b>
F Oct. 26	Studio Workshop
<u>Week 11</u>	
M Oct. 29	The Principles of Computer Music (Holmes – pp. 338-363)
W Oct. 31	The Popularization of Electroacoustic Music in Commercial Music (Holmes – pp. 418-431, pp. 457-466, pp. 448-453)
F Nov. 2	*Homecoming – No Class*

Week 12

- M Nov. 5 Timbre
- W Nov. 7 Rise of Affordable Sampling and Hybrid Home Studios  
(Modulations – 1st half)  
**\*\*Listening Quiz #3\*\***
- F Nov. 9 Studio Workshop

Week 13

- M Nov. 12 \*Holiday – No Class\*
- W Nov. 14 Rise of Affordable Sampling and Hybrid Home Studios (cont.)  
(Modulations – 2nd half)
- F Nov. 16 Studio Workshop  
**\*\*Small Composition Project #3 Due\*\***

Week 14

- M Nov. 19 Contemporary Acousmatic Music /  
Frequency and Pitch
- W Nov. 21 \*Holiday – No Class (tentative)\*
- F Nov. 23 \*Holiday – No Class\*

Week 15

- M Nov. 26 Soundscape Music /  
Intervals, Scales, Tuning, and Temperament
- W Nov. 28 Instrument and Electronics  
**\*\*Listening Quiz #4\*\***
- F Nov. 30 Studio Workshop

Week 16

- M Dec. 3 Interactivity
- W Dec. 5 Sound Art / Installation
- F Dec. 7 \*Reading Day – No Class

Week 17

- W Dec. 12 **\*\*Final Exam and Final Projects Discussion\*\*** (10am – 12pm)

## **Course Guidelines:**

### Attendance Policy

Attendance is required for participation in this course. Please arrive on time. Should you miss class, it is your responsibility to obtain notes from the day(s) you were absent not from the instructor, but rather from one of your peers. Please note that once you acquire unexcused absences exceeding 3 class meetings, your final grade will suffer one whole letter grade.

### Email

Please check your UF email account regularly, as I will be sending out information about assignments and important dates, as well as various handouts from time to time.

### Late Work

Late work is reduced one full letter grade for every day it is past due (ex. A to B). However, if you have extenuating circumstances please let me know as far in advance from the due date as you can.

### Cell Phones

Cell phone use is not permitted during class time. Please keep your phone off the computer desk and tucked away in your bag or pocket. Students caught using their phones during class will be marked absent for the day.

### Concerts

Students are required to attend the Unbalanced Connection electroacoustic concert series (date and time TBD). Schedules permitting, students are also expected to help setup and take down audio/visual equipment before and after the concert. Unbalanced Connection give students firsthand experience with loudspeaker configuration, amplification, signal flow, software routing, microphone selection and placement, mixing console applications, and cabling.

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## **Academic Honor Policy:**

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing

this assignment.” The Honor Code (<https://sccr.dso.ufl.edu/students/student-conduct-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TA in this class.

**Online Course Evaluations:**

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>

**Accommodations for Students with Disabilities:**

Students with disabilities requesting accommodations should first register with the Disability Resource Center ( (352)-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/) ) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

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**Health and Wellness Resources:**

U Matter, We Care:

If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) or (352) 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: <https://counseling.ufl.edu/about/> (352)-392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS) : Student Health Care Center, 392-1161.

University Police Department, (352)-392-1111 (or 9-1-1 for emergencies):  
<http://www.police.ufl.edu/>

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**Academic Resources:**

E-learning technical support, (352)-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu <https://lss.at.ufl.edu/help.shtml>

Career Resource Center, Reitz Union, (352)-392-1601. Career assistance and counseling: <http://www.crc.ufl.edu/>

Library Support, Various ways to receive assistance with respect to using the libraries or finding resources: <https://cms.uflib.ufl.edu/ask>

Teaching Center, Broward Hall, (352)-392-2010 or (352)-392-6420. General study skills and tutoring: <http://teachingcenter.ufl.edu/>

Writing Studio, 302 Tigert Hall, (352)-846-1138. Help brainstorming, formatting, and writing papers: <https://writing.ufl.edu/writing-studio/>

Student Complaints Campus: [https://www.dso.ufl.edu/documents/UF\\_Complaints\\_policy.pdf](https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf)

On-Line Students Complaints: <http://distance.ufl.edu/student-complaint-process/>