Music 80C
History and Literature of Electronic Music
Tuesday/Thursday, 1-4PM
Music Center 131

Instructor: Madison Heying
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Office Hours: By Appointment

Course Description:
　　　　This course is a survey of the history and literature of electronic music. In each class we will learn about a music-making technique, composer, aesthetic movement, and the associated repertoire.

Tests and Quizzes:

　　　　There will be one test for this course. Students will be tested on the required listening and materials covered in lectures. To be prepared students must spend time outside class listening to required listening, and should keep track of the content of the lectures to study.

Assignments and Participation:

　　　　A portion of each class will be spent learning the techniques of electronic and computer music-making. Your attendance and participation in this portion of the class is imperative, since you will not necessarily be tested on the material that you learn. However, participation in the assignments and workshops will help you on the test and will provide you with some of the skills and context for your final projects.

　　　　Assignment 1: Listening Assignment **(Due June 30th)**

　　　　Assignment 2: Field Recording **(Due July 12th)**

Final Project:
　　　　The final project is the most important aspect of this course. The following descriptions are intentionally open-ended so that you can pursue a project that is of interest to you; however, it is imperative that **your project must be connected to the materials discussed in class**. You must do a 10-20 minute in class presentation of your project. **You must meet with me at least once to discuss your paper and submit a ½ page proposal for your project.** This is worth 5% of your final project grade; I will discuss the resources you should consult and include in your bibliography.

There are three options for the final project:

1. Create a piece of electronic or computer music. For this option, your piece must be related to the content of the course. For example, if you are interested in a particular

technique or aesthetic, try to emulate it or incorporate it into your own musical style. The materials you turn in must include:

- A proposal of your project (**Due July 5**)
- Some documentation of the piece (score, recording, etc.)
- A **2-3 page paper** detailing your compositional process and how your piece relates to the content of the course. Must include bibliography and citations.

2. Write a Research Paper. If you would like to write a research paper, either select a topic discussed in class that you would like to know more about or a topic that you think relevant but we will not talk about in class (such as EDM, RAP, Techno, and more contemporary/popular electronic music). You could write about a genre, composer, aesthetic, an instrument or technology (a specific synthesizer or software for instance). You must turn in:

- A proposal of your project (**Due July 5**)
- A 7-10 page paper. Must include bibliography and citations.

3. Propose a project. If the first two options are not appealing to you, propose a project that would be more interesting/useful to you. If you chose this option, the required meeting with me and the written proposal will be extremely important so that we can work together to shape an appropriate project for the course. You should turn in:

- A proposal of your project (**Due July 5**)
- Some documentation of your project (film, diagrams, software, hardware)
- A **2-3 page paper** detailing your compositional process and how your project relates to the content of the course. Must include bibliography and citations.

Grading:

Test: 20%
Assignments: 20%
Participation: 20%
Final Project: 40%

Ecommons:

The required listening and recommended readings is available on ecommons. Some of the materials may need to be accessed online through the library's website. There is no textbook for this course. All readings will be pdfs or websites.

Extra Credit (10 points):

There will be **one** extra credit opportunity. There is a concert of electronic music at the Radius Gallery (at the Tannery) on Thursday June 30th. If you attend this concert and write a one-page report you will receive up to 10 points extra credit. If for some reason you cannot attend this concert, and you let me know **ASAP**, I will figure out an alternative for you.

Class Schedule

Week 1

June 21, Tuesday, Introduction

In Class:
- Go over syllabus
- Discuss "electronic music"
- Basics of music: acoustics, frequency and pitch, loudness, timbre
- Early Electronic Instruments: Recording technology, Cahill, Russolo, Theremin, Ondes Martenot

Listening:
- Luigi Russolo, *Risveglio di una Citta* (1921)
- Clara Rockmore, *Valse Sentimentale*

June 23, Thursday, Early Electronic Music

In Class:
- Early Electronic Music: John Cage, Johanna Beyer, Louis and Bebe Barron
- Tape Music Techniques

Guest Lecture: Scott Tooby (DANM), Contemporary Live Electronic Music

Listening:
- Cage, *Imaginary Landscape No. 1* (1939)
- Beyer, *Music of the Spheres* (1938)
- John Cage, *Williams Mix* (1951–53)
- Louis and Bebe Barron, "Main Title" from *Forbidden Planet* (1956)

Week 2

June 28, Tuesday, Electronic Music Studios

In Class:

- Electronic Music Studios (Europe):
    1. RDF, France (*musique concréte*)
    2. WDR, Germany (*elektronishe musik*)

**Tape Machine Workshop with Scott Makson

Listening:
- Pierre Schaeffer, *Etudes du Bruits* (1948)
- Varése, *Poeme Electronique* (1958)
- Stockhausen, *Kontakte* (1959–60)

June 30, Thursday, Electronic Music Studios, cont.

Assignment #1 Due

In Class:
- Electronic Music Studios (USA):
  1. CPEMC, NYC
  2. SFTMC, San Francisco
  3. Once Group/Sonic Arts Union

Listening:
- Pauline Oliveros, *Bye Bye Butterfly* (1965)
- Steve Reich, *Come Out* (1966)
- Alvin Lucier, *I am Sitting in a Room* (1969)
- Gordon Mumma*, Hornpipe* (1967)

Week 3

July 5, Tuesday, Synthesizers

******Final Project Proposals Due******

In Class:
- Synthesizers
  1. Robert Moog
  2. Don Buchla
- In the Studio
- Crossover between experimental and popular
- Introduction to Environmental Sound Art and Field Recording

Discuss Assignment 2

Listening:

- Wendy Carlos, *Switched on Bach* (1968)
- Maggi Payne, *Crystal* (1987)

- Eliane Radigue, Trilogie de la Mort (1987–1991)

July 7, Thursday, Sound Art and Environmental Recordings

In Class:
- Sound art and performance art
- Sound art and the environment
- R. Murray Schafer, acoustic ecology

**Synthesizer Demo with Scott Makson

Listening:

- David Dunn, *Mimus Polyglottos* (1976)
- Annea Lockwood, *Jitterbug* (2007)

Week 4

July 12, Tuesday, Computer Music

Assignment #2 Due

In Class:
- Early Computer Music (1950s): Lejaren Hiller and Leonard Isaacson
- Bell Labs (1960s), James Tenney
- In the 70s, Charles Dodge
- In the 1980s, Carla Scaletti and Kyma

Listening:
- Tenney, *Phases* (1963)
- Dodge, *Earth's Magnetic Field* (1970)
- Laurie Spiegel, *Appalachian Grove I* (1974)
- Scaletti, *sunSurgeAutomata* (1986)

July 14, Thursday

EXAM

*** Guest Lecture Phillip Hermens***

Week 5

July 19, Tuesday

In Class:

- Work on final projects

July 21, Thursday

Final Project Presentations