

Syllabus

EMBODIED SONIC MEDITATION: A CREATIVE SOUND EDUCATION

Instructor: Jiyue Cecilia Wu

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Class schedule: CCS Bldg 494, Room 143; Mon/Wed 1:30 pm – 2:50 pm,

Office hour: Phelps room 3314; Thu 1: 45 pm–3:45 pm, or by appointment

Introduction

What is the difference between hearing and listening? What are the connections between our listening, bodily activities, and the lucid mind? This interdisciplinary course on acoustic ecology, sound art, and music technology will give you the answers. Through deep listening (Pauline Oliveros), compassionate listening (Thich Nhat Hanh), soundwalking (Westerkamp), and interactive music controlled by motion capture, the unifying theme of this course is an engagement with sonic awareness, environment, and self-exploration. Particularly we will look into how we generate, interpret and interact with sound; and how imbalances in the soundscape may have adverse effects on our perceptions and the nature. These practices are combined with readings and multimedia demonstrations from sound theory, audio engineering, to aesthetics and philosophy. Students will engage in hands-on audio recording and mixing, human-computer interaction (HCI), group improvisation, environmental film streaming, and soundscape field trip. These experiences lead to a final project in computer-assisted music composition and creative live performance. By the end of the course, students will be able to use computer software to create sound, design their own musical gears, as well as connect with themselves, others and the world around them in an authentic level through musical expressions.

Course Requirements

1. Class participation: total 40%

- *Attendance: 20%; (Absences are not excused unless you have doctor note from SHC or CAPS)*

- *Active engagement in class discussions: 10%*

- *Completion of weekly assignments: 10%*

2. Completion of homework 1, 2 and 3, each 10%, total 30%

3. Completion of a final project: 30%

- *In order to pass the course, please make sure you submit **all** homework assignments and project!*

- *2 late days for homework submission can be applied anytime during the quarter. Use them wisely as HW1 is quite straightforward ☺*

Course Agenda

Week 1-4: Connecting with Ourselves – Sonic Awareness

Week 5-7: Connecting with Others – The Creative Sound Practice

Week 8-10: Connecting with the World – The Creative Self-Expression

CCS Grading Policy

Courses taken in the College are reported in terms of Passed/No Record. The grade Passed shall be strictly reserved for work of satisfactory quality. For each passed course, the student shall receive from one to six units of credit, as determined by the instructor of the course. If the course is not passed, it is removed from the student's record and no credit is given.

* Mental Health Students may feel overwhelmed or depressed with coursework, stress and/or other personal challenges. If you find yourself, or another student, in need of support, please do not hesitate to reach out to Counseling and Psychological Services (CAPS), 24/7 at (805) 893-4411. Website: <http://caps.sa.ucsb.edu/>

* Syllabus subject to change due to guest musicians' schedules

April 3-7, week 1: Experiencing Sonic Vedanā

- Mon: - Course and student intro and logistics
 - Secular sonic meditation with Tibetan singing bowls (1);
 - The difference between hearing and listening: Pauline Oliveros & *Deep Listening*;
- Assignments: 1. Listen: [Pauline Oliveros: A Love Song](#) & [John Cage: Imaginary Landscape No.1](#)
 2. Watch: [John Cage's 4'33"](#), a performance by William Marx
 3. Complete the pre-course survey;
- Wed: - Secular sonic meditation with Tibetan singing bowls (2);
 - Group discussion about the assignments
 - Sound and making sound, Install and intro to ChuckK music programming language
- Assignment: 1. Play around with ChuckK, have fun ☺
 2. Read: "The Future of Music: Credo" by John Cage (1937)
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April 10-14, week 2: Sound Evolution or Revolution?

- Mon: - Secular sonic meditation through mindful breathing (1);
 - Edgard Varese and his vision about new music;
 - P. Schaeffer & Musique Concète;
 - John Cage
 - Stockhausen & spatial sound;
 - Luc Ferrari and field recording;
 - Max Matthews, Bell Labs, and computer music;
 - CCRMA and IRCAM;
 - Curtis Roads & Micro-sound;
- Assignments: 1. Watch: [Max Matthews: Radio Baton](#)
 2. Listen: [Stockhausen – Kontakte](#)
[Luc Ferrari – Presque Rien No.1](#)
[Curtis Roads – Point Line Cloud](#) (selected excerpt)
- Wed: - Secular sonic meditation through mindful breathing (2);
 - Group discussion about the assignments and readings
 - Intro of DMW Audacity, sound transformation, MIDI, OSC, & mixing techniques
- Assignment: 1. Play around with ChuckK and Audacity, have fun ☺
 2. Read: Edgard Varese and W. Chou "The Liberation of Sound"
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April 17-21, week 3: Electronic Sound and Interactive Design

- Mon: - Secular sonic meditation through voice (1);
 - Digital Music Instrument (DMI) design: Input, control, and mapping concepts;
 - Case study on *Tibetan Singing Prayer Wheel*
 - Case study on Music and Meditation interface
- Assignments: Watch: - [Pamela Kurstin: "The untouchable music of the Theremin"](#)
 - [Imogen Heap: "Sculpting Music with Mi.Mu Gloves"](#)
 - [Donna Hewitt: IDOL](#)
- Wed: - Guest lecture+ Q&A: DMI inventor and musician Romain Michon from Stanford University
 - Secular sonic meditation through voice (2);
- HW1***: Write a 1-page paper talking about your idea of DMI design. *DUE WEEK 5 on May 1.*
 Read: Cook, Perry. "Principles for designing computer music controllers."
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April 24-28, week 4: Experiencing Embodied Sonic Meditation

- Mon: - A guided *Soundwalk* and walking meditation experience (field trip location TBD)
- Wed: - A guest lecture + Q&A in ChuckK, given by CalArts faculty Dr. Spencer Salazar.
- HW2***: Reflect on soundwalk; combined with the sound materials we've gathered and the audio mixing/transformation knowledge we've learned so far to realize a 1-2 minutes stereo étude in Audacity, or in any other Digital Music Workstation you have, such as *Logic* and *Ableton Live*. Bring your étude to class to share with us. *DUE WEEK 6 IN CLASS ON MAY 8.*

May 1-5, week 5: Concept of Embodied Sonic Meditation

Mon: - Presence through movement–Tai Chi

Guest lecture by Professor Baogan Wu from Jinan University, China

Assignments: Watch: - [Jugalbandi of Alla Rakha & Zakir Hussain – Tabla](#)

- [Masterclass Pauline Oliveros: “Listening Meditation and Improvisation in Solos, Duos, Trios &…”](#)

Wed: - Secular sonic meditation through sound-making (1);

- Intro of Embodied Sonic Meditation concept

- HW1 in class review and discussion.

Read: Todd Winkler: “Making motion musical: Gesture mapping strategies for interactive computer music.”

HW2 IS DUE IN CLASS NEXT MON. BRING YOUR PIECE TO CLASS TO SHARE COMING MON

May 8-12, week 6 (Half way point): Listen, Understand, and Communicate

Mon: - A sonic meditation through your and your peers’ composition + afternoon tea ceremony

- Being able to stop, think, and reflect about all of the things you have heard is very

important. Reviewing and reflecting helps us to retain what we have learned and to increase our awareness of what happened. There is always room for improvement. As a group, we also need to think about what kinds of things we could improve. These kinds of reflections lead to evaluating what went well and what needs improvement. You will be given a survey at the end of the day. This survey will also help us to make improvements.

@@Reminder: for this Wednesday’s class:

Bring an instrument to the class. Any thing that makes sound(s) is welcome!

Wed: - Warming-up: reflective physical exercises

- Embodied sonic meditation through music improvisation section (1);

- In class ChuckK section for running code and HW3 preparation.

HW3*: Use your mouse, keyboard, web camera, or any motion trackers that you have to create and interact with sound. Technical tutorials can be found on page 4 of this syllabus. You are welcome to explore any other technology that you are familiar with. **Bring your results to the class WEEK 8 on Wednesday, May 23, for improvisation section 3.** (Note: Students without any programming experience who are not comfortable trying coding, use the knowledge you’ve learned + your creativity to make a gestural DMI design and demonstrate how it works. Slideshows are preferred.)

May 15-19, week 7: Riding the Waves – Embodied Sonic Mediation Practice

Mon: - Warming-up: reflective physical exercises

- Guided Embodied Sonic Meditation through music improvisation section (2)

- Final project brainstorming and discussion, teamwork is encouraged.

Wed: - Final project proposal sharing

- Embodied music cognition;

- Sound and wellness: auditory feedback and sensory-motor coupling

- Continuing working on your DMI design and implementation

Assignment: Read: - Leman, Marc. "Musical gestures and embodied cognition."

Continue working on your HW3 interactive sound system/ DMI design.

BRING YOUR HW3 NEXT MONDAY TO PLAY IN IMPROVISATION SECTION 3.

May 22-26, week 8: Riding the Waves – Embodied Sonic Mediation Practice (2)

Mon: - Improvisation session (3)

- Inspire your peers by sharing your creative HW3! Tell us every juicy detail of how it works!

Assignments: Read -Thich Nhat Hanh “[The Fourth Precept: Deep Listening And Loving Speech.](#)”

Wed: - Classroom film streaming and discussions on award winning documentary – “*Sonic Sea.*”

Assignment: - Read: Fried, Robert “Integrating music in breathing training and relaxation.”

- Listen: [1952, The Sound of the Sea](#)

May 29 – June 2, week 9: Sound and Environment**There is no class on May 29 (public holiday).**

Wed: - Sound ecology; Soundscape, acoustic communication and environmental sound composition; Sonic impact on humans, and Mother Nature.

Assignment:

- Working on your final projects. And think about the impact of soundscapes, and how we can incorporate this aspect to make positive changes to our inner and outer world.

June 5 – 9, week 10:

Mon: Wrapping up the quarter, reflection, afternoon tea

Final presentations might be presented if Wednesday's section is not long enough for all projects.

Wed: Final Presentations.

Important Course Resources:

1. Chuck Online Tutorials:

- *Chuck free online course: <https://www.kadenze.com/courses/introduction-to-programming-for-musicians-and-digital-artists/info> (sign up is required)

* You are strongly encouraged to go through this Kadenze online course and play around with the Chuck code examples: <http://chuck.cs.princeton.edu/doc/examples/>

- Chuck language specification: <http://chuck.cs.princeton.edu/doc/language/>
- Chuck instruments and sound effects: <http://chuck.cs.princeton.edu/doc/program/ugen.html>
- Text: <http://apprize.info/programming/chuck/index.html>
- Forum: <http://electro-music.com/forum/topic-13512-100.html>

2. Interactivity concept: (sign up is required)

<https://www.kadenze.com/courses/programming-max-structuring-interactive-software-for-digital-arts-i/sessions/interactivity> (session 8: queue 8, 9, 10, 15)

3. MIDI tutorials: http://www.indiana.edu/~emusic/etext/MIDI/chapter3_MIDI.shtml

4. OSC tutorials: <https://www.music.mcgill.ca/~gary/306/week9/osc.html>

For those who wanted to go one step further:

Theories of music technology:

1. Curtis Roads <Composing Electronic Music: A New Aesthetic> Chapter 3, 5, and 12
2. [Jay Kadis <The science of Sound recording>](#)
3. Chadabe, J. <Electric sound> chapter 8.

Sound art theories:

1. John Cage <Silence>
2. Pauline Oliveros <Deep Listening - A composer's sound practice>
3. Schafer, R. M. <[A Sound education: 100 exercises in listening and sound-making](#)>