# Music 15

#### Lecture 6

Wednesday, Feb 19, 2020

#### **Lecture Outline**

- 1. Announcements
- 2. Section Information
- 3. Assignment 2 Feedback
- 4. Quiz Feedback
- 5. Letter Grade Calculation
- 6. Assignment 4 Overview
- 7. One-on-one help

#### Announcements

• Assignment 4: DUE by 11:59 pm this Friday, Feb 21.

#### **Section Information**

- **Grades for Assignment 2** have been posted on Canvas!
- If you didn't receive a grade, you should have received a message from me asking for more information

# **Assignment 2 Feedback**

- How did everyone do? Scores are out of 10.
  - Average: 9.3 (11 am section)
  - Average: 9.2 (12 pm section)
- What did I deduct points for?
  - Missing items in the document
  - Fewer than 2 instruments/8 bars in the composition
  - Late submission

## **Quiz Feedback**

- Class statistics (all sections):
  - <u>Average</u>: 74%
  - High score: 97%
  - Low score: 27%
- One of the questions about FM synthesis was quite challenging
  - Only 33% of students got it correct
  - We decided to award everyone an extra 3 points
- If you didn't do well on the quiz, can you still get an A in the course?
  - The quiz is **only worth 10%** of your overall grade
  - You can earn up to 5% extra credit if you turn in your final project early

#### **Letter Grade Calculation**

| Cutoffs |       |
|---------|-------|
| F       | 0     |
| D-      | 60    |
| D       | 63.33 |
| D+      | 66.67 |
| C-      | 70    |
| С       | 73.33 |
| C+      | 76.67 |
| В-      | 80    |
| В       | 83.33 |
| B+      | 86.67 |
| A-      | 90    |
| A       | 93.33 |

# **Assignment 4 Overview**

- What should my submission look like?
  - a. A PDF document that follows this template: <u>https://chadmckell.com/pdf/a4\_mus15\_template.pdf</u>
- Write a <u>1-3 min composition</u>. Your composition <u>must use at least two</u> of these methods:
  - a. Atonal music, Serialism
  - b. Random / Aleatoric melodies and rhythms
  - c. Clusters / Sonority
  - d. Heterophony, Micropolyphony
  - e. Spectral music / Foley effect
  - f. Process music, Algorithm
  - g. Other experimental methods

## **Assignment 4 Overview**

- To accomplish this, you may use any of the following:
  - a. Lexikon Sonate: http://www.essl.at/works/Lexikon-Sonate.html#ava
  - b. PixelSynth: https://ojack.github.io/PIXELSYNTH/
  - c. lannix: <u>https://www.iannix.org/en/download-iannix/</u>
  - d. Your own method, e.g. data sonification: <u>https://www.youtube.com/watch?v=XY0IdksIbLQ</u>
- If you decide to use Lexikon Sonate or PixelSynth, you'll need to figure out a way to record the audio. I recommend using one of the following:
  - a. <u>Mac users</u>: Soundflower
  - b. <u>Windows users</u>: Soundflower, Stereo Mix, or Audacity's WASAPI Loopback

**Directions for setting up Lexikon Sonate on your computer:** 

- 1. Download Lexikon Sonate: <u>http://www.essl.at/works/Lexikon-Sonate.html#ava</u>
- 2. Download the VST plugins for Mac OS X: <u>http://mda.smartelectronix.com/</u>
- 3. Open Lexikon Sonate
- 4. Go to Settings -> Load VST Piano Plugin...
- 5. Open the folder of VST plugins and choose a plugin (e.g. "mda Piano.vst")
- 6. Make sure the power button is turned on in your Audio Status window
- 7. You should now hear audio!

Power button

| Au Au                     | dio Status                |
|---------------------------|---------------------------|
| ባ                         | CPU 0.00 %                |
| Driver                    | Core Audio 🔹              |
| Input Device              | Built-in Microphone 🛛 🔻   |
| Output Device             | Built-in Output 🗾 👻       |
| Performance and Scheduler |                           |
| Sampling Rate             | 44100 -                   |
| I/O Vector Size           | 512 🔻                     |
| Signal Vector Size        | 64 🔻                      |
| Scheduler in Overdrive    | X Audio Interrupt $	imes$ |
| CPU % Limit               | <b>▶</b> 0                |
| Input                     | Output                    |
| Ch 1 1 Input 1 🔻          | Ch 1 1 Output 1 -         |
| Ch 2 2 Input 2 🔻          | Ch 2 2 Output 2 -         |
| Audio Driver Setup        | Open I/O Mappings         |

#### Lexikon-Sonate

algorithmic music generator for computer-controlled piano 1992-2018 by Karlheinz Essl vs. 5.0



- To satisfy the requirements of the assignment, **you must use** <u>at least two</u> modules in Lexikon Sonate. You can engage 2 or more modules simultaneously, or start with one module then switch to others later in the composition. I've categorized a few of the Lexikon Sonate modules below:
  - a. Atonal music, Serialism (Gruppen)
  - b. Random / Aleatoric melodies and rhythms (BrownChord)
  - c. Clusters / Sonority
  - d. Heterophony, Micropolyphony
  - e. Spectral music / Foley effect
  - f. Process music, Algorithm (Joyce)
  - g. Other experimental methods (any of the other modules)

# **Assignment 4 Overview - PixelSynth**

- If you choose to use PixelSynth, you must do the following:
  - Use <u>at least two</u> different images in your composition
  - Include screenshots of each image in your PDF document
- Under "Methods used and reason for choice" in your PDF document, you may classify this experimental composition technique as "image sonification"



# **Assignment 4 Overview - Soundflower**

- **Download here:** <u>https://github.com/mattingalls/Soundflower/releases/tag/2.0b2</u>
- In order to install and use the software, you must follow the instructions given by the developers on the website linked above!
- <u>Note</u>: in Lexikon Sonate, you'll need to set your input and output devices to Soundflower (2ch)
- You should now be able to record audio using QuickTime Player.

## **Assignment 4 Overview - Windows Users**

If you're a Windows user and you're having trouble recording your composition with Soundflower, try using one of the options described in the article linked below (Stereo Mix, Audacity's WASAPI Loopback, or an audio cable).

https://www.howtogeek.com/217348/how-to-record-the-sound-coming-from-your-p c-even-without-stereo-mix/

If none of these options work, try downloading Soundflower on one of the Mac computers in Geisel Library or in the CPMC computer lab.

# **On-on-one help**

Please help someone in need if you are finished