

**Computer Music Composition**  
**Project #1: Sound Synthesis in Max/MSP**  
**Spring 2018**

The final version of your project is due by on Monday May 7. We will share our projects in class, so please email your file ahead of time.

For your first project, you will create a large MSP patch. This patch should contain at least four “sub-patches.” These four sub-patches can work together to create a composite sound, or they may work independently to produce four separate sounds. Each “sound” that you create must be controllable in real-time.

To ensure that your project is ambitious enough, use several objects in each of the following object categories. (Note: You do not need to use all listed objects, you may choose to use more of a single object instead.)

**Signal generators:**

cycle~  
phasor~  
noise~

**Signal modifiers:**

reson~ (resonator filter)  
comb~ (filter with delays)  
tapin~ and tapout~ (delay objects)

**General Controls:**

line~  
metro  
random  
counter

Your main page should contain all the controls needed, including controls for subpatches. Use a preset bank on your main page to save exact settings of your sounds. This will ensure that I will hear your patch as you intended it to sound.

Advice:

- Remember to control and shape all three parameters of the sounds you create:
  1. frequency
  2. amplitude
  3. timbre
- Do not try to add too many objects to your patch if you feel you have made something interesting already.
- Try some objects we have not used in class. Explore and have fun!