

**Electroacoustic Music I**  
**MUS 332 01**

Tuesday & Thursday 9:00 a.m. – 10:45 a.m.  
4 credits  
Location: Benildus 238 (Composition Studio)

**Instructor: Steven M. Miller**

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**Assignments and Projects**

Note: Consult semester schedule for due dates.

**Assignment 1: Editing Exercise 1**

Using track 1 of the provided CD as source, edit the material as follows:

The CD track contains a sentence and several additional words. Edit the sentence, removing, adding, and/or replacing words, so that the resulting sentence is both grammatically correct and as natural sounding as possible.

Sentence: Now is the time for all good men to come to the aid of their country.  
Additional words: Bad, red, lazy, patriotic, evil, homeland, opportunity, soon.

**Assignment 2: Editing Exercise 2**

Using track 1 of the provided CD as source, manipulate the material with editing, speed change, and direction change to create a short etude (1-2 minutes, maximum).

**Assignment 3: Editing Exercise 3**

Using any acoustic sound source(s) recorded via microphone in the studio, create 3 tape loops of varying lengths, using the tape manipulation techniques learned so far in class: editing, speed change, direction change.

**Assignment 4: Musique concrète etude**

Using no more than 3 acoustic sounds as source material, recorded via microphone in the studio or elsewhere, create a brief (2-3 minute) etude in the style of Musique Concrète. Example sound sources might be traffic sounds, nature sounds, motors, industrial sounds, doors creaking, etc. No 'musical' sounds (i.e. instruments, synthesizers, etc.) should be used, and all sounds you use must be originally recorded by you - no sound effect or sample libraries allowed.

Utilizing the tape recording and manipulation techniques learned in class, such as editing, speed/direction change, tape-delay, multi-track recording, and mixing, create a piece with interesting formal and timbral features, with a goal of attaining maximum variety from a minimum of sound sources. No signal processing (reverberation, digital delay, filtering, etc.) is allowed beyond simple EQ and tape-delay.

**Assignment 5: Mixing Exercise**

Using materials from your first 3 assignments, record them onto individual tracks of the multi-track recorder. Create a short etude (1-2 minutes) on the material using simple mixing techniques of layering, fade in/out, muting, panning, EQ, etc.

### **Assignment 6: Processing Exercise**

Using the same multi-track recording as the previous assignment, create a short etude (1-2 minutes) on the material using mixing techniques with extensive use of EQ, panning, reverb, and delay.

### **Midterm Project: Tape music composition**

The midterm project will consist of one stereo tape music composition of 3-5 minutes duration. The primary sound materials will be any acoustic or electric/electronic sound source recorded via microphone. You will use the multi-track recording and tape-manipulation techniques covered in class including layering, mixing, tape loops, editing, speed/direction change, delay, reverb, EQ, etc. Emphasis in grading will be on both technical skill and compositional interest.

You must turn in, along with the stereo master and multitrack tapes, a 1-page graphic score and a track chart.

### **Assignment 7: Analog Synthesis 1**

Using the analog synth, create 3 variations on the basic VCO-VCF-VCA patch and record approximately 30 seconds of the output of each. Fully notate the patches in the standard patch notation system.

### **Assignment 8: Analog Synthesis 2**

Using the analog synth, create 3 variations on the basic VCO-VCF-VCA patch with complete control via CV sources and record approximately 30 seconds of the output of each. Fully notate the patches in the standard patch notation system.

### **Assignment 9: Analog Synthesis 3**

Using the analog synth, create 3 variations on the basic VCO-VCF-VCA patch with complete control via CV and gate/trigger sources and record approximately 30 seconds of the output of each. Fully notate the patches in the standard patch notation system.

### **Final Project: Electroacoustic composition**

The final project will consist of one multi-track electroacoustic composition of 3-5 minutes duration. The primary sound source will be the analog modular synthesizer, though you may use other external sound sources as well, with the following proviso: external sounds must be processed with the analog synth or used within a patch on the synth as a source to control some aspect of its operation. You should also use the mixing and tape-manipulation techniques covered in class including layering, mixing, tape loops, editing, speed/direction change, signal processing, etc.

You must have at least 5 separate/different patches you create on the modular analog synth, and each must be documented as fully as possible using the standard patch notation system. You will create your multi-track master on the 8-track, and then mix this down to the stereo machine. The final stereo master must be in a standard format, meaning all panning, speed changes, etc. are already recorded/encoded on the tape.

You must turn in, along with the stereo master and multitrack tapes, a track chart and all analog synth patch diagrams. Your documentation must also indicate the time of the first occurrence of each patch and/or sound source in the finished composition.