

## Sample Syllabus

### **Music Synthesis, Composition, and MIDI 2**

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#### **Required Course Materials**

- 1 set of Headphones (1/4" jack)
- 1 CD-R for Final Project
- CD-R(s) and/or USB Flash Drive for Weekly Assignments

#### **Prerequisite**

MUSC 190 – Music Synthesis, Composition, and MIDI 1

#### **Description**

Continued training in the use of computers, MIDI (Musical Instrument Digital Interface), and digital audio, software synthesizers, and software samplers to compose, record, edit, and perform music. Further aspects of MIDI and digital audio will be discussed, as well as sampling and signal processing.

#### **Objectives**

- Understanding of the fundamentals of computer composition using software sequencers and samplers
- Ability to program a sampler
- Ability to use and program Effects units
- Understanding of ReWire
- Ability to record, edit and process digital audio
- Ability to create an Automated Mix within a software sequencer

Students should be able to continually demonstrate competency with all assigned material.

#### **Procedures**

Classes will include lecture/demonstrations on computer music principles. Students will be given assignments each week and are expected to complete them in-studio between classes. Students are to sign in when using the studio, and are advised to schedule at least three hours of studio time per week for the semester. Students will present their work to the class for critiquing by the group each week.

#### **Attendance**

Attendance is mandatory. Students will be responsible for all material covered in class lectures.

## Grading

There will be a Midterm and a Final Project in addition to the weekly assignments. The Midterm will be written and cover concepts and terms introduced from the lectures.

Student participation and progress through the semester will be an important factor in the grade. Any work that is handed in must be done in **pencil** (ink *will not* be accepted) and must be **very neat** (sloppy work will not be accepted). Pages must be clipped or stapled together. **Absence from class is not an excuse for not completing assignments.**

Late work will not be accepted.

## The Final Project

The Final Project will consist of a CD that will demonstrate successful use of the MIDI workstation in creating a piece of music of fairly ambitious scope. Techniques in programming and sonic architecture will be judged in assigning a grade to the the Project. In addition to the Audio File, the Project Folder, any samples, a Program Note, an MP3 or RealAudio file set up for streaming audio, and an HTML page (for streaming audio) will be handed in as part of the final project.

## Grading Scale

<b>A</b>	90 - 100%
<b>B+</b>	85 - 89%
<b>B</b>	80 - 84%
<b>C+</b>	75 - 79%
<b>C</b>	70 - 74%
<b>D</b>	65 - 69%
<b>F</b>	0 - 64%

## Grading Percentage Breakdown

Grades will be given for all homework, tests, and major exams, as follows:

<b>Homework</b>	25%
<b>Progress and Participation</b>	10%
<b>Midterm</b>	30%
<b>Final Project</b>	35%

## Tentative Course Outline

<u>Week #</u>	<u>Topic</u>	<u>Assignment (times are minimums)</u>
Week 1	Introduction, Orientation & Review Introduction to Effects	0:30 piece using SubTractor, ReDrum, and Matrix
Week 2	Digital Audio Review Effects 1: Reverb, Delay, Chorus and Flange	1:00 piece using Reverb, Delay, Chorus and/or Flange
Week 3	Effects 2: Distortion, Filters, Compressors, Limiters and EQ	1:00 piece using Distortion, Filters, Compressors, Limiters, and/or Distortion
Week 4	Effects 3: BV512 Vocoder and Scream 4	1:00 piece using BV512 and/or Scream
Week 5	Other Types of Signal Processing Effect Automation Send effects vs. Insert Effects Mixers, part 2: AUX Sends and SubMixes	1:00 piece using Send Effect and Effect Automation
Week 6	Mid-Term	
Week 7	Granular and WaveTable Synthesis Malström	1:00 piece using Malström
Week 8	Sampling NN19 and NN-XT, part 1	1:00 piece using NN19 and/or NN-XT
Week 9	NN19 and NN-XT, part 2 Digital Audio Editing 1 Getting Creative with CV and Gate Routing Spider Audio and CV Mergers & Splitters	2:00 Group Project
Week 10	The Combinator The MClass Mastering Suite	Final Project Proposal (written)
Week 11	ReWire – Using Reason with other software and instruments Digital Audio Editing 2 – Editing Software	
Week 12	Presentation of Final Projects	3:30 Final Project piece