Instructor:
Steve Cunningham: (323) 697-7248 (cell), (213) 821-4204 (ofc)
E-mail: cunningh@usc.edu
Skype: synthmann
Facetime (synthman1999@gmail.com)
Office: LPB 107
Office Hours: M/W 10-11:30am, Tu 2-4pm, Th 12-2pm ; other meetings by appointment.

Course Description
MIDI Music Production is an introduction to the techniques of sequencing and recording musical compositions via MIDI on personal computers. Discussions will also include a study of the hardware and software required, processes and functions common to all sequencers and performance, editing and orchestration techniques that yield a musical result.

Course Objectives:
By the end of this class students will be able to produce a MIDI recording of their compositions and accompaniments for solo and ensemble performances. In addition, they will be able to export the MIDI recording to a musical notation program create parts for live performance. Students will also be familiar with a wide variety of MIDI software and hardware that will enable them to effectively purchase and put together a home MIDI studio.

Requirements, Exams and Grading Information:
Student assessment in MUSC 311 will consist of short practical assignments, a midterm exam and a final project. Unless otherwise noted, all exercises are due one week from the date assigned. All assignments are to be turned in to the class folder on the Overture server and must carefully follow file naming conventions, file management and format guidelines. Instructions for the term project will be available at a later date.

The midterm-exam will be a hands-on exam designed to test the student’s practical skills. A study guide will be available the class meeting prior to the test. Tests must be taken during the scheduled time. Make-up exams will only be allowed for documented illness and emergencies.

The final project will consist of a sequence of 10-15 musical parts, approximately 65 measures in length. Students can choose 20th or 21st century classical scores, jazz scores or original compositions subject to the instructor’s approval. Final projects will be presented in class during finals week. Further instructions will be available at a later date.

Grading Summary:
1. Participation 10%
2. Exercises 40% total
3. Midterm Exam 20%
4. Final Project 30%

Letter grades are assigned strictly by percentage: 90+ = A, 80 – 89.99 = B, 70 – 79.99 = C, 60 – 69.99 = D, < 60 = F. Grades ending in 0 but less than 4 are minus, while those ending in 7 but less than 0 are plus (except for A, which has no plus grade). Grades are not “curved” or “rounded” – please do not ask.
Class Texts:


Supplementary Materials:
1. Headphones (Sony, MDR-7506 required)
2. USB Memory Stick

Communication:
Please make it a habit to use/check your USC E-mail account. Any E-mails I send to the class will use that account. ***Please add “311” in the subject header of all emails that you send me*** This will help me to organize all the emails that I receive and respond to you more quickly. In addition all course materials and class grades will be posted on BlackBoard (http://blackboard.usc.edu). For example the course syllabus can be found under Course Information, lecture notes under Course Documentation, and exercise and project instructions under Assignments.

Disabilities:
Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.-5:00 p.m. Monday through Friday. The phone number for DSP is 213/740-0776.

Tentative Schedule:

<table>
<thead>
<tr>
<th>Week 1</th>
<th>01/15</th>
<th><em>The MIDI Studio Setup</em></th>
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<tr>
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<td>MIDI language</td>
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<td>MIDI devices and Instruments</td>
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<td><strong>Reading Assignments</strong></td>
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<td>MM – 1, 3, 4</td>
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<tr>
<th>Week 2</th>
<th>01/22</th>
<th><em>Introduction to Logic Pro</em></th>
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<tbody>
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<td></td>
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<td>MIDI setup</td>
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<td>The Arrange window</td>
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<td>Track types, views</td>
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<td>Viewing, sizing tracks vertically, horizontally</td>
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<td>The Transport window</td>
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<td>Playback shortcuts</td>
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<td><strong>Lecture Notes</strong></td>
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MUSC 311 Syllabus, continued…

Week 3 01/29  Basic MIDI Sequencing  MM 2, 5
MIDI signal routing
Click tracks
Track setup
Introduction to Virtual Instruments
Real time recording
Step-time recording
Buffer settings
Overdubbing, MIDI-merge, punch-in/ punch out

Exercise 1: Sequencing exercise

Week 4 02/05  MIDI Editing  Handout
MIDI note-on messages, velocity, transposition, duration
Quantization basics
Graphic editors
Score editor
Standard MIDI files, import/export

Exercise 2: MIDI Editing exercise

Week 5 02/12  MIDI Editing II and VI Samplers  Handout
Copy and paste
Multi-output virtual instrument setup
Articulation and Sequencing
Event list editing, filter
Memory Locations

Exercise 3: Working with articulations

Week 6: 02/19  Drum Sequencing  Handout
Virtual drummers (Drummer) and Pattern sequencers (Ultrabeat)
Programming effective drum parts
MIDI Looping
Introduction to automation
Working with audio files
Layering MIDI tracks

Exercise 4: Drum sequencing

Week 7 02/26  Midterm Examination
We

Exercise: 5: Continuous controllers exercise

Week 9 03/12 Subtractive Analog Synthesis
Analog synthesis overview
Filters, cutoff frequency, resonance
LFOs, envelopes and modulation
Arpeggiators and step sequencers

Exercise 6: Synthesizer exercise

Week 10 03/19 Spring Break

Week 11 03/26 MIDI Orchestration Techniques 1 and Virtual Instruments 2
Rhythm section tips
Keyboard emulation plug-ins
Guitar and bass reamping plug-ins
Final Project explanation and expectations

Exercise 7: Rhythm section exercise

Week 12 04/02 MIDI Orchestration Techniques 2
Woodwind orchestration tips
Brass orchestration tips
Kontakt Presets
Complex tempo tracks
Proposal check for Final Project

Exercise 8: Orchestra excerpt exercise

Week 13 04/09 Working with Audio Timing
Quantizing audio
FlexTime basics
Audio looping

Exercise 9: Audio beat mapping exercise

Week 14 04/16 Working with Audio Tuning
Correcting pitch in audio
Flex Pitch basics

Exercise 10: Audio pitch correct exercise

Week 15  04/23  Mixing a MIDI Project  Handout
Duplicating tracks/Layering sounds
Signal Processing
Automation/Continuous Controllers

Final Projects Progress Check
Students work on projects in class
Instructor check’s student progress and helps resolve student problems

Week 16  04/30  Finishing a MIDI Project  Handout
Listening Critically
Listening on Multiple Monitors
Dither/Bounce to Disk

Final Projects Progress Check
Students work on projects in class
Instructor check’s student progress and helps resolve student problems

05/03  Final Projects Due at 5pm. There will be no Final Exam.

Important Note! The G147 lab will be closed as of 5pm on 05/05. There will be no open lab time after that date. There will be no exceptions to this policy. Please plan accordingly.