NYC College of Technology

The City University of New York
Entertainment Technology Department

MUSIC TECHNOLOGY
Professor Elodie Lauten
ENT 1260
Fall 2013

Fridays 10am-1:40pm
Contact: elauten@yahoo.com
212-388-0202

Course Description
The course provides an introduction and overview of the basic techniques and components used in electronic music production. Students will work on individual workstations, having the opportunity to explore various kinds of music production software and acquire a working knowledge of GarageBand and Reason. The rudiments of music theory and methods for composition and arrangement will be reviewed. **Synthesis, Sequencing, Sampling**, and loop-based composition will be introduced. Also covered are elements of music technology history, a detailed presentation of the **MIDI** protocol and its applications, techniques for configuring hardware and software systems for optimal effectiveness, and the basics of mixing and producing music in a professional environment. The students are required to create several short pieces where they apply the production techniques they have learned as well as their own creativity.

Required Text
Musicianship in the Digital Age, Edstrom, Brent, Course Technology Ptr., 2005
ISBN: 1592009832
Additional Text:
Music Theory for Computer Musicians, Hewitt, Michael, Course Technology, 2008
ISBN-13: 1598635034
Required Tools (needed for every class):
Headphones (preferably not earbuds), USB flash drive to save your work

Grading

- Labs & Assignments 20%
- Midterm 20%
- Creativity 10%
- Attendance/Participation 25%
- Final Project 25%

NOTE: Attendance to every class is required and will be reflected in grades. According to CUNY's policy, no more than three absences will be accepted to pass the class. Lateness or partial attendance will affect grades negatively.

Session	Topic*	Labs/Assignment	Reading
1 Aug 30	Lecture: Introduction/History of Electronic Music/Music questionnaire/Course goals		
2 Aug 30		Lab: Explore GarageBand	MUST PURCHASE BOOKS
NOTE: NO CLASSES ON FRIDAY, SEPTEMBER 6 AND SEPTEMBER 13			
3 Sep 20	Lecture: The Computer Music Studio		*Musicianship in the Digital Age* Ch. 1: Computers and Software and Ch. 2: Setting up a project studio
4 Sep 20		Lab: GarageBand Exercise Quiz: Computers Exercise: Design Your Home Studio	
5 Sep 27	Lecture: Elements of Theory Part I		*Musicianship in the Digital Age* Ch. 7: Loop-based production pp. 181-185 *Music Theory for Computer Musicians* Ch. 2, 8
6 Sep 27		Lab Tutorial: Reason in Six Easy Steps Homework: Song Analysis	
7 Oct 4	Lecture: Elements of Theory Part II Student presentations: Song Analysis		
8 Oct 4		Lab Tutorial: Create drum track with Reason's Redrum	
9 Oct 11	Lecture: MIDI Part I		*Musicianship in the Digital Age* Ch. 3: Introduction to MIDI Ch. 4: Sequencing concepts
10 Oct 11		Lab Tutorial: Working with MIDI files MIDI questionnaire/ Mid-term assignment explained	
11 Oct 18	Lecture: MIDI Part II		
12 Oct 18		Lab: Prepare Mid-term – finish song, MIDI Questions Review	
13 Oct 25	***Mid-Term – Students present their songs and answer MIDI written questionnaire***		
14 Oct 25			
15 Nov1	Lecture: Sampling		*Musicianship in the Digital Age* Ch 6: Music Synthesis pp. 166-174 *Music Theory for Computer Musicians*: Ch. 1 Musical Sound
16 Nov 1		Lab Tutorial: Create and map samples with Reason's NNXT	
17 Nov 8	Lecture: Introduction to Synthesis Part I		
18 Nov 8		Lab Tutorial: Analog simulation with Reasons's Subtractor	
19 Nov 15	Lecture: Introduction to Synthesis Part II		
20 Nov 15		Lab Tutorial: Mastering Reason's Thor in Six Easy Steps	
21 Nov 22	Lecture: Sequencing		
22 Nov 22		Lab Tutorial: Step sequencers in Reason	*Musicianship in the Digital Age* Ch. 12 Sequencing Bass & Drum grooves
NOTE: THIS CLASS TAKES PLACE ON WEDNESDAY, SAME SCHEDULE			
23 Nov 27	Lecture: Elements of Electronic Orchestration		
24 Nov 27		Lab Tutorial: Orchestration lab in Reason / Final project explained	
NOTE: NO CLASS ON FRIDAY, NOVEMBER 29 – THANKSGIVING HOLIDAY			
25 Dec 6	Lecture: Mixing and Effects		
26 Dec 6		Lab: Final Project: Create one song and one synthesizer patch	
27 Dec 13	Lecture: Composition Recap/ Music Technology Review		
28 Dec 13		Lab: Final Project: Create one song and one synthesizer patch	
29 Dec 20	***Final Project – Student present their songs and synthesizer patches***		
30 Dec 20			

*Tentative schedule, subject to change.