MUSC 1331 – MIDI I

Audio Recording Program / Northwest College
CRN 71490 – Spring 2011
Spring Branch Campus – PAC Rm#418 | TR 3:30pm-5:30pm
3 Hour Lecture, 4 Hour Lab course/ 112 Contact Hours per semester / 16 weeks

Instructor: Aric Nitzberg, (713) 718-5961, aric.nitzberg@hccs.edu

Office Hours: 3PM-4PM Mondays & Wednesdays in PAC Rm#440c Other hours by appointment.

Course Description:

An overview of the Musical Instrument Digital Interface (MIDI) system and applications. Topics include the history and evolution of MIDI, hardware requirements, computer numbering systems, channels and modes, the MIDI language, and typical implementation of MIDI applications in the studio environment using software-based sequencing programs. Students are required to attend additional lab hours outside of class.

Prerequisites: None

Course Goal:

Have students understand and apply concepts and techniques of MIDI implementation in a modern recording studio.

Student Learning Outcomes:

The student will be able to:

1.Identify and define terminology associated with the synthesis of sound,. MIDI, sequencing programs and Macintosh computers
2. Demonstrate proper use of terminology associated with the synthesis of sound, MIDI, sequencing programs and Macintosh computers
3. List and define the properties of a sound
4. Define the relationship between pitch and frequency
5. Define the relationship between timbre and waveform
6. List and describe the common building blocks used in the synthesis of sound (VCA, DCA, VCO, DCO, LFO, wavetable, etc.)
7. Demonstrate an ability to use and program the general sections of a modern digital synthesizer (global functions, performance functions, multi-timbral functions, controller functions.)
8. List and describe common methods to synthesize sound
9. Compare and contrast common methods used to synthesize sound
10. List and describe methods used to modify synthesized sounds
11. Describe monophonic, polyphonic and multi-timbral sound synthesis
12. List and describe common features found on sound synthesizers
13. List and describe MIDI events
14. Describe and identify MIDI ports, signal flow and connections

15. Demonstrate the ability to create and modify a sequence file template with appropriate tracks, track assignments and transport track and edit windows
16. Demonstrate the ability to record and modify MIDI events using a computer sequencer program
17. Demonstrate the ability to play back and rearrange MIDI information record to a computer sequence program
18. Demonstrate the ability to record, edit, save and transmit system exclusive data used by a MIDI synthesizer
19. Demonstrate the proper connections of MIDI devices using "IN", "OUT", and "THRU" ports and MIDI cables
20. Demonstrate the proper use of MIDI channels
21. Demonstrate an ability to detect and describe the relative pitch, partial content and envelope of a sound
22. Demonstrate an ability to detect and describe modifiers being used in the synthesis of sound

SCANS or Core Curriculum Statement:

The following workplace competencies and foundation skills have been designed into this courses curriculum:
Identify and define terminology associated with the synthesis of sound,. MIDI, sequencing programs and Macintosh computers

Demonstrate proper use of terminology associated with the synthesis of sound, MIDI, sequencing programs and Macintosh computers

List and define the properties of a sound

Define the relationship between pitch and frequency

Define the relationship between timbre and waveform

List and describe the common building blocks used in the synthesis of sound (VCA, DCA, VCO, DCO, LFO, wavetable, etc.)

Demonstrate an ability to use and program the general sections of a modern digital synthesizer (global functions, performance functions, multi-timbral functions, controller functions.)

List and describe common methods to synthesize sound

Compare and contrast common methods used to synthesize sound

List and describe methods used to modify synthesized sounds

Describe monophonic, polyphonic and multi-timbral sound synthesis

List and describe common features found on sound synthesizers

List and describe MIDI events

Describe and identify MIDI ports, signal flow and connections

Demonstrate the ability to create and modify a sequence file template with appropriate tracks, track assignments and transport track and edit windows

Demonstrate the ability to record and modify MIDI events using a computer sequencer program

Demonstrate the ability to play back and rearrange MIDI information record to a computer sequence program

Demonstrate the ability to record, edit, save and transmit system exclusive data used by a MIDI synthesizer

Demonstrate the proper connections of MIDI devices using “IN”, “OUT”, and “THRU” ports and MIDI cables

Demonstrate the proper use of MIDI channels

Demonstrate an ability to detect and describe the relative pitch, partial content and envelope of a sound

Demonstrate an ability to detect and describe modifiers being used in the synthesis of sound

16 WEEK CALENDAR

WEEK ONE Intro, Syllabus, OSX, **Listening Assignment, Juno D Lab**

WEEK TWO MIDI hardware, *Chapter 1,* Getting Started DP, USB

WEEK THREE Music Basics, MIDI messages, *Chapter 2,* **Drum Lab,** Toast

WEEK FOUR Channel Voice Messages, **JV1010 Lab**

WEEK FIVE Control Changes**,** Using DP 3, Review for Quiz 1

WEEK SIX Quiz 1, Mid Term Project

WEEK SEVEN Return Quiz 1, work on Mid Term Projects

WEEK EIGHT **Mid Term Exam, Mid Term Projects Due**

WEEK NINE Return and review Mid Term Exams and Projects
General MIDI and SMF, *Chapter 4,* **SMF Lab**

WEEK TEN Automation, **Auto Lab**

WEEK ELEVEN Importing Audio Files

WEEK TWELVE Intro to Logic, **Logic Loops Lab, Logic Pro Lab,** Review for Quiz 2

WEEK THIRTEEN Final Project, Quiz 2

WEEK FOURTEEN Return Quiz 2, Work on Final Projects

WEEK FIFTEEN **Final Project Due,** Review for Final Exam

WEEK SIXTEEN **Final Exam**

Instructional Methods:

MUSC 1427 is a required course for all audio recording majors. Instruction includes project-based learning, discussions, demonstrations, lectures, textbook reading, and peer-to-peer learning.

Student Assignments:

Students will be required to complete the following assignments during the semester:
Student Survey
Mac OS X Lab
Listening Assignment
Juno Sounds
Reading Review Questions Chapter 1
Drum Lab
JV1010 Sounds
Reading Review Questions Chapter 3
Mid Term Project
Reading Review Questions Chapter 4
Standard MIDI Files Lab
Reading Review Questions Chapter 8
Automation Lab
Logic Loops Lab
Logic Pro Lab
Final Project

Assessments:

Attendance: 10%
Labs: 20%
Quizzes: 10%
Midterm: 15%
Final Exam: 15%
Major Projects: 30%

Instructional Materials:

1. Pocket USB Drive (1GB minimum)

2. *MIDI Power! by Robert Guerin* **ISBN** 978-1598630848

3. CD-Rs for data backup and Audio CDs

4. Jewel cases or paper sleeves for CD-Rs

5. Permanent marker (for labeling CDs)

6. Notebook for notes

7. Stereo Headphones with ¼" and 1/8" plugs

Class Attendance

Class Attendance - It is important that you come to class! Attending class regularly is the best way to succeed in this class. Research has shown that the single most important factor in student success is attendance. Simply put, going to class greatly increases your ability to succeed. You are expected to attend all lecture and labs regularly. You are responsible for materials covered during your absences. Class attendance is checked daily. Although it is your responsibility to drop a course for nonattendance, the instructor has the authority to drop you for excessive absences.

If you are not attending class, you are not learning the information. As the information that is discussed in class is important for your career, students may be dropped from a course after accumulating absences in excess of 12.5% hours of instruction. The six hours of class time would include any total classes missed or for excessive tardiness or leaving class early.

You may decide NOT to come to class for whatever reason. As an adult making the decision not to attend, you do not have to notify the instructor prior to missing a class. However, if this happens too many times, you may suddenly find that you have "lost" the class.

Poor attendance records tend to correlate with poor grades. If you miss any class, including the first week, <u>you are responsible for all material missed.</u> It is a good idea to find a friend or a buddy in class who would be willing to share class notes or discussion or be able to hand in paper if you unavoidably miss a class.

HCC Policy Statement – ADA

Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at the respective college at the beginning of each semester. Faculty is authorized to provide only the accommodations requested by the Disability Support Services Office.

HCC Policy Statement – Academic Honesty

A student who is academically dishonest is, by definition, not showing that the coursework has been learned, and that student is claiming an advantage not available to other students. The instructor is responsible for measuring each student's individual achievements and also for ensuring that all students compete on a level playing field. Thus, in our system, the instructor has teaching, grading, and enforcement roles. You are expected to be familiar with the University's Policy on Academic Honesty, found in the catalog. What that means is: If you are charged with an offense, pleading ignorance of the rules will not help you. Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty. "Scholastic dishonesty": includes, but is not limited to, cheating on a test, plagiarism, and collusion.

Cheating on a test includes:

- Copying from another students' test paper;
- Using materials not authorized by the person giving the test;
- Collaborating with another student during a test without authorization;
- Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of a test that has not been administered;
- Bribing another person to obtain a test that is to be administered.

Plagiarism means the appropriation of another's work and the unacknowledged incorporation of that work in one's own written work offered for credit.

Collusion mean the unauthorized collaboration with another person in preparing written work offered for credit. Possible punishments for academic dishonesty may include a grade of 0 or F in the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the College System. (See the Student Handbook)

HCC Course Withdrawal Policy

If you feel that you cannot complete this course, you will need to withdraw from the course prior to the final date of withdrawal. Before you withdraw from your course; please take the time to meet with the instructor to discuss why you feel it is necessary to do so. The instructor may be able to provide you with suggestions that would enable you to complete the course. Your success is very important. Beginning in fall 2007, the Texas Legislature passed a law limiting first time entering freshmen to no more than **SIX** total course withdrawals **throughout** their educational career in obtaining a certificate and/or degree.

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor *may* "alert" you and HCC counselors that you might fail a class because of excessive absences and/or poor academic performance. It is your responsibility to visit with your professor or a counselor to learn about what, if any, HCC interventions might be available to assist you – online

tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

If you plan on withdrawing from your class, you **MUST** contact a HCC counselor or your professor prior to withdrawing (dropping) the class for approval and this must be done **PRIOR** to the withdrawal deadline to receive a "W" on your transcript. **Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online registration calendars, HCC schedule of classes and catalog, any HCC Registration Office, or any HCC counselor to determine class withdrawal deadlines. ***Remember to allow a 24-hour response time when communicating via email and/or telephone with a professor and/or counselor. Do not submit a request to discuss withdrawal options less than a day before the deadline.* If you do not withdraw before the deadline, you will receive the grade that you are making in the class as your final grade.

Repeat Course Fee

The State of Texas encourages students to complete college without having to repeat failed classes. To increase student success, students who repeat the same course more than twice, are required to pay extra tuition. The purpose of this extra tuition fee is to encourage students to pass their courses and to graduate. Effective fall 2006, HCC will charge a higher tuition rate to students registering the third or subsequent time for a course. If you are considering course withdrawal because you are not earning passing grades, confer with your instructor/counselor as early as possible about your study habits, reading and writing homework, test taking skills, attendance, course participation, and opportunities for tutoring or other assistance that might be available.

Instructor Requirements:

As each instructor sees fit.

Program/Discipline Requirements:

None for this course.

HCC Grading Scale:

90 - 100 = A
80 - 89 = B
70 - 79 = C
60 - 69 = D
Below 60 = F

RESOURCES

Instructor Learning Web: http://learning.hccs.edu/faculty/aric.nitzberg
MIDI 1 Blog: http://hccmidi1.blogspot.com/

Please bookmark these pages. You can download all handouts, assignments and tutorials from the Learning Web page. I will post class information and links on the blog.