Intro to MIDI Syllabus

Course Title: Introduction to MIDI and Electronic Technology

Course Number: MUSC 460

Instructor's name: David Hartl

Semester and Year: Fall 2009

Days and Times of Class Meetings:
Sec. 2: Fri 10:00-12:50

Locations of Class Meetings:
    Sec. 2: Merriam 707
In addition, we have access to Merriam 205 and Terra 1212 for special topics. Please watch your e-mail for exact details and any changes, and look for postings by the elevators in the Merriam as well.

Summary of course content/ topics to be covered: The course is designed to be a introduction to concepts of MIDI and electronic technology. MIDI is presented as the latest phase in the evolution of electronic music as past and current methods of electronic composition and performance are discussed and demonstrated. By completing weekly exercises, students receive a working knowledge of various types of synthesis methods, software sequencing and editing, sound and sample editing, and live applications as well as basic understanding of the nature of music production in the "MIDI-Digital Audio Studio". The history of electronic music and film scoring strategies are also covered. No prior composition skills are required, and students are encouraged to develop their own voice through technique-specific but stylistically neutral exercises.

Information Literacy: Student is required to complete a research and writing assignment on a topic dealing with film scoring or electronic music history. Topic will be assigned by instructor.

Grading Policy: The final grade will be derived from a total of: A) weekly assignments, B) written exams, C) the final project, D) class participation, and E) attendance.
    A) Weekly assignments
        Weekly assignments of reading materials and exercises based on techniques demonstrated and discussed in class are to be worked on and completed during students' lab time and due the following week. Exercises will be presented and discussed in class, and graded by the instructor. Since students come from many different disciplines, weekly assignments are not judged on compositional ability, but rather by the quality of execution of the techniques the exercise is supposed to address. Since these projects reflect the student's understanding of the topics and the material is cumulative, late submissions are worth half-credit up to one week after the due date. No credit is given after one week.

B) Written exams

In addition to a cumulative final exam, there will be several quizzes addressing the technical material and the essential information needed to understand the creative options available using MIDI as well as the concepts and terminology used throughout the semester.

C) Final project: Due Monday, Dec. 14, noon

There is a mandatory final project involving scoring a short film segment using the tools covered in class. Final projects are judged on how well the techniques covered in class are implemented and the effectiveness of the score.

D) Class participation

A grade will be issued for a student's overall preparation and performance for classes. Students are expected to be able to ask and answer questions as well as participate in class discussions based on their classroom note taking in addition to the readings.

Note that computers are our main tools in the course, but they are also the main source of distraction from lecture information. Any student engaged in non-classroom use of computers will find their class participation grade adversely effected.

E) Attendance

See below for attendance policy.

ALL NUMERIC GRADES WILL BE CONVERTED TO LETTER GRADES AS FOLLOWS:

93 - 100 = A; 90 - 92 = A-;
87 - 89 = B+; 83 - 86 = B; 80 - 82 = B-;
77 - 79 = C+; 73 - 76 = C; 70 - 72 = C-;
67 - 69 = D+; 60 - 66 = D;
59 and below = F.

Absence and Lateness Policy: 2 (two) unexcused absences are permitted for the semester. This means a student can miss two classes with no explanation and no harm will come to his grade. PLEASE NOTE: our Friday 3-hour session is actually 2 classes, back-to-back!

Beyond this two-absence limit, each absence results in a reduction in the final grade: 3 (three) absences will yield a grade of 70% of the total attendance grade, 4 absences will yield an failure of the attendance grade. At 5 (five) absences the student will receive a grade of "F" (failure) for the entire course.

The only exception to this would be medical reasons supported by proper documentation, at which point the student should apply for a grade of "I" (incomplete), which must go through the Director and Dean's offices.

If a student is more than 15 minutes late to class, he/she will be marked absent. Two latenesses will equal 1 (one) absence.

If the instructor fails to appear within 15 (fifteen minutes) after the scheduled start time of the class and has not posted a notice regarding a different starting time for the class, the students will not be required to wait for the instructor and therefore, free to leave the class with no repercussions.

Other classroom policies:

Any student found to be disruptive in class will be immediately asked to leave and will take an unexcused absence for that class. Students are expected to adhere to university standards of behavior and academic honesty.

We do our work in computer labs. You are expected to be using your computer as an educational, and not a recreational tool during class time. Anybody found to be accessing an inappropriate site will be asked to leave and earn an unexcused absence for that day.

Cell phones and pagers must be turned off and kept out of sight. Silent vibrate mode is just as distracting as a ringer. If your device goes off in class, you will be asked to leave and earn an unexcused absence for that day.

As in all university classes and computer labs, eating and drinking is expressly forbidden.

Required materials:

Required reading and listening: Various, found on reserve in the music library and assigned on a week-to-week basis

Required text: Apple Pro Training Series: Logic Pro 8 and Logic Express 8: Creating and Producing Professional Music by David Nahmani. Peachpit Press, 2008.

Set of headphones with 1/4" and 1/8" adapters

Media storage, i.e. flash drives, CD-Rs. Projects will be graded in whatever classroom in which we meet; all students are expected to be able to download their projects to that room's computers as part of the overall technical grade .

Instructor's Office Hours Schedule: Fri 3:00 – 4:00 and also by appointment

Instructor's Office and Phone Number: Merriam Room 400, (215)-717-6350; email at <dhartl@uarts.edu>

INTRO TO MIDI - MUSC460
Fall '09 Weekly Semester Schedule

1.) Introduction to course, discussion of requirements, etc. Apple computer basics. Basic signal paths of AC, MIDI, CV, audio, and computer data paths. Basic MIDI concepts. Types of MIDI messages. Overview of Reason and its modules. Analog synthesis path.

2.) Synth history 1: telharmonium, theremin, ondes martinot. Reason continued. Continuous controllers.

3.) Synth history 2: electromechanical instruments. Intro to Logic. Text assignment ch. 1.

4.) Synth history 3: analog modular synths. Text assignment ch. 2.

5.) Synth history 4: musique concrete. Digital audio concepts. Text assignment ch.3.

6.) Synth history 5: digital synthesis, Yamaha DX7. Text assignment ch.4. Acoustical concepts: mechanics of sound, decibels and sound pressure, graphic representations of waveforms, tuning systems and overtone series.

7.) Synth history 6: sample playback. Looping, keymaps, and other sampler concerns. Text assignment ch. 5.

8.) Synth history 7: wavetable synthesis. Text assignment ch. 6.

9.) Synth history 8: acoustic/analog emulation (soft synths). Text assignment ch. 7. Tempo, beat maps, locking sequencer to audio tempo.

10.) Synth history 9: granular. Text assignment ch. 11. Movie scoring strategies, examples.

11.) Text assignment ch. 8. Movie scoring figures, business considerations.

12.) Text assignment ch. 9. Mixing and mastering. Time-delay effects. Alternate tunings.

13.) Text assignment ch. 10. Amplitude-based effects. MIDI transmission code. Burning a finished CD.

14.) Text assignment ch. 12. Reading a MIDI implementation chart. Importing SMFs. The return of CV.

15.) Projects are due on Monday, Dec. 14 at noon. Class time on Friday will be spent seeing the projects and taking the written final exam.