

LEBANON VALLEY COLLEGE - MRT/ MUSIC BUSINESS PROGRAM  
Digital Audio MRT 374 - Spring 2009  
Class Time: MWF 9 -10:50 - Classroom: Blair Room 228/218  
Instructor: Professor Jeff Snyder  
Office: 112 Blair Music Office Complex - Telephone: 867-6277 Office - E-mail: Snyder@Lvc.edu

*This syllabus is a general description about the purpose and goals of the class. You should read it through so as to understand the parameters and requirements expected of you. Please ask the instructor about any portion of this syllabus that you do not understand. The instructor retains the right to modify this syllabus at anytime. If this takes place, students will be informed before the modifications are implemented.*

#### COURSE DESCRIPTION:

This course is an exploration of the principles and applications of digital audio in today's recording and interactive media industries. Topics discussed include: digital audio fundamentals, recording and reproduction systems theory, computer and hardware based recording, editing, and audio for music and other media applications. The class will consist of lectures, demonstrations, labs, and student presentations.

The class will consist of both lecture and real time use of digital audio in music and sound creation.

#### COURSE OBJECTIVES:

Upon completion of the course, students will be able to:

- Define principles, current standards, and common terminology associated with digital audio technologies.
- Have an understanding of the use of various sound creations and editing software programs.
- Identify current and future trends in digital audio technologies.
- Evaluate past and present digital audio commercial products.
- Identify opportunities to apply digital audio technologies in self-marketing and commercial use.
- Create various projects that reflect the different uses of digital audio technologies in music and industrial recording, sound design, audio for Internet, and audio for video.
- Define and use various digital storage mediums.
- Define and use various digital interfaces and connection components.
- Define and use various synchronization techniques.

#### SOFTWARE:

The main program will be ProTools. All programs will be provided on the lab computers.

*Students should use the software and computers available in the labs. Personal software other than the software used in class is not an option. Incompatibility between personal PCs and lab computers is not a reason for failure to provide required assignments and projects. Using cracked or stolen software to complete assignments will result in assignments being refused with a failure grade given.*

#### HEADPHONES:

Students must purchase high quality headphones (a necessary tool that any engineer should own). *The headphones in the Piano Lab can not be used or moved!*

#### TEXT:

Roback, S. (2007) *PRO TOOLS 7 for Macintosh and Windows*, PeachPit Press.  
Aldrich, N. (2005) *Digital Audio Explained: 2<sup>nd</sup> Edition* Fort Wayne Indiana, Sweetwater Sound

#### INTERNET:

This syllabus and other related materials can be found at <http://csunix1.lvc.edu/~snyder>

#### STORAGE MEDIA:

Students must purchase storage media to be used in class. New media, rather than used media, is highly recommended.

Preferred- USB Thumbdrive/Memory Stick.

Note: A thumbdrive that is formatted for PC will usually be able to be read by a Mac, but it is likely that there will come a time when the drive or data is not recognized by a Mac. Therefore, it is highly recommended that the thumbdrive be initialized for Macintosh, and only used for this class (not used to store papers, documents, email, etc.). These are also easily lost or broken, so be sure to have multiple copies of your data. A project not being presented on time because of a lost, unreadable, or broken thumbdrive will be given a failure grade.

CD-R (CD-RWs will not play digital audio files on standard CD players)

It is up to each student to save and back up data. *Failure to present or turn in a project because of lost data will result in a failing grade for that project.* Lost data because of crashes, dogs, hurricanes, meteors, or nuclear holocaust will not excuse the student from meeting deadlines.

SAVE OFTEN. BACK UP DATA. EXPECT THE UNEXPECTED!

Each student will be cognizant of hard drive space for each computer. Each student will trash his or her material at the end of a session unless permission is granted by the instructor to leave the data on the hard drive. The instructor reserves the right, at any time, to erase any material on a hard drive that has not been pre-approved for storage.

Emailing data to yourself to be downloaded in class is also not an option since the files can be changed, and the size of the files can be very large. Because of college bandwidth limitations, uploading and downloading large audio files doesn't always work.

## COMPUTERS:

All software for assignments can be found on the eMacs in the Piano Lab. The lab is open for student use most evenings, a key is not needed (or available). Studio B and C will also be used for tracking, editing, etc.

The use of the studios, computers, and hardware is a privilege, not a right. This privilege can be revoked.

If a computer crashes for any reason, simply move to another computer (having backed up your data). Please inform the instructor or lab assistant about any computer problems, in a respectful and calm manner. *Blaming the computers for: incomplete work, not meeting project requirements, lost data, missing deadlines, etc. will not be tolerated.* Do not wait until the last moment to work on projects.

- Please be sensitive with classmates with regards to sharing time.
- The labs MUST be monitored at all times, and doors MUST BE LOCKED whenever it is vacated FOR ANY REASON.
- Using the computers for anything other than MRT program assignments (especially IM, chats, downloads, etc) will result in loss of points and privileges. Stealing software is considered unlawful. Changing/altering the operating systems (including the screen parameters such as background, dock location, etc) will result in loss of points and privileges.
- Never install or remove software from a computer without prior approval from Mr. Hill or Mr. Snyder.
- You will be held responsible for any destruction, alteration, or theft of school property during the time that you use the studios or labs. Your grades and or graduation will be suspended until legal or financial restitution is made.
- Do NOT move or reconnect school property without prior permission. If permission is granted, you are required to put the property back in the condition that it was found.
- Please keep the studios in neat and clean conditions. Turn off all equipment and put away headphones, etc. when you are finished. Failure to do so will result in suspension of access.

## COURSE REQUIREMENTS:

- \* Class participation is required. Contributions to discussions may be figured into the final grade.
- \* The classroom door may be locked at the time class is scheduled to begin. Therefore, all latecomers will be considered absent for the day.
- \* This is a project-intensive course. Self-initiative in learning new software programs and content creation is imperative.
- \* Deadlines will be firmly enforced.
- \* Failure to meet deadlines will result in a 0 grade for the assignments.
- \* Late assignments will not be accepted unless previous permission by instructor is granted.
- \* Civil behavior is expected from all students.
- \* Disrespect shown for classmates or instructor *will result in being immediately removed from the class until the Dean states otherwise.*
- \* Students are expected to remain quiet and respectfully pay attention to student and instructor discussions or presentations.
- \* Whispering, private conversations, studying for other classes, and any other distractions or rude displays while the instructor or fellow students discuss or present course material will be considered to be disrespectful and may result in expulsion from the classroom and grade penalties.
- \* Packing up books and other distractions before the class is dismissed will be considered to be disrespectful.
- \* Drunkenness or coming to class 'under the influence' will result in expulsion from the class until the Dean states otherwise.

## TESTING:

The possible points for each test, assignment, report, etc., will be announced when they are given to the class:

- There will be one major written test for this course: Final exam.
- The instructor may give pop quizzes at anytime.
- Individual student exercises will be graded based on quality, creativity, following instructions, and initiative.
- Each exercise will carry a 100-point value.
- A final project and presentation will be required at the end of the semester.
- Test material will come from reading and class discussions. Take Notes!

Grading will be based on the following criteria:

- \* 2 Individual exercises = 100 points each (based on the complexity of the assignment).
- \* 1 Final exam = 100 points
- \* Lack of participation/misbehavior = -25 points per class [deducted from final grade]

Standards for Evaluation Number-to-Letter Conversion:

0-59 F, 60-62 D-, 63-66 D, 67-69 D+, 70-72 C-, 73-76 C, 77-79 C+, 80-82 B-, 83-86 B, 87-89 B+, 90-92 A-, 93-100 A

- A = excellent, B = above average, C = average, D = below average, F = failing
- Grades will be presented not as letter grades, but as the quality they represent.
- The instructor retains the privilege of changing the number of exams and point values.
- The mid-term and final grades will be calculated by taking the total points of all assignments and tests, and comparing them to the total points earned.

## PROJECTS:

Learning about digital audio recording, audio tools, and software is up to the self-initiative of each student. Projects are given as introductions to various aspects of digital audio. Completing the minimum requirements for projects will result in average grades.

### Time

- \* Though some time may be allowed in class for working on projects, the bulk of the work will take place outside of class.
- \* Students must anticipate time and computer demands and start projects as soon as possible.
- \* Students are encouraged to work on projects or become familiar with software while the instructor is available in case of problems or questions.
- \* Time must be anticipated for simply learning the software. Trying to learn the software and creating the project the night before the due date will usually, at best, result in average work. The instructor will not be impressed with all-nighters because of waiting till the last moment.

### Final Project

- The final project will be a capstone digital audio project/performance to be presented to the class at the end of the semester.
- The final project will consist of personal live performance accompanied by an original electronic composition generated by the computer.
- Requirements of the project will be given in a separate document.

### Individual Projects

- \* Projects will not be accepted after given deadlines and a 0 will be given as a grade.
- \* Usually, the project will be presented to the class.
- \* In some cases, the class may grade the projects. (The instructor retains the right to disallow peer grades that are skewed or not honest appraisals of a classmate's project.)
- \* In other cases, the instructor will assign a grade.
- \* It is up to each student to determine *before* a class presentation of a project whether the project will play back and be displayed properly.
- \* Failure to *meet all requirements and expectations* of the assignment will result in a failing grade for the project.
- \* Did I mention that projects will not be accepted after given deadlines?

### ATTENDANCE:

Though there is not an attendance requirement for this class, Attendance will be monitored.

- You are responsible for all material discussed in class.
  - You are responsible for all assignments given in class.
  - There will be no make-up presentations except for the conditions stated below.
  - There will be no make-up exams except for the conditions stated below.
  - Consistent attendance may be a factor in borderline grades (I will notice if you miss class).
  - Three or more unexcused absences may result in being reported to the Dean as an early-warning report.
  - Classes will be held in both 228 (Studio B) and the piano Lab. The instructor will announce any changes.
  - Do not ask the instructor to show software, discuss assignments, or review material missed because of skipping a class - except for the following reasons:
- \* Illness verified by the instructor.
  - \* Family emergency (verified by the Dean of Students).
  - \* Inclement weather (classes canceled)

### Tardiness:

Tardiness will not be tolerated. As juniors, you must learn to be prompt as you prepare for the 'real-world'.

### INSTRUCTOR CONTACT:

The instructor's office hours are posted on the door of his office. Though students may try to drop by for consultation, it is highly recommended that appointments be made. Arranging an appointment is best achieved by stating in E-mail, or in discussion before or after class, the purpose of the appointment and possible times to meet. *The instructor is more than willing to meet with any student that wishes to speak to him.* Students *must* take the initiative to meet the instructor to discuss any class or personal issues.

### ORDER OF SUBJECTS COVERED

- Reading assignments will be given in class.
- Sufficient time will be allowed in covering subject material or software.
- Guests that are involved in the creation of electronic music may be asked to visit the class for presentation and discussion
- Sufficient time will be allowed for the presentation of projects.
- Some classes will be devoted to lab-work and the instructor will monitor the progress of understanding and use of the software by each student.

The general order of subjects covered will be based on these sections:

- Digital audio language
- Incoming components
- Digital signal processing
- Outgoing components
- Errors
- Reduction and compression
- Media.

It is the responsibility of the student to read and understand this syllabus. If a student does not understand any portion of this syllabus, the instructor will be glad to answer any questions. If a student does not ask questions, the instructor will assume that the student understands and agrees to the requirements as stated. If a student does not agree to the class parameters as set forth in the syllabus, the student must withdraw from the class the first week of the semester.

PT = ProTools Book      DA= Digital Audio book