

"There are no shortcuts to any place worth going."--- Beverly Sills

MUS 214 Music: Recording Technology 1

CAB154, WED 12-2

Instructor: Steve Bailey

SPRING 2011

Credit Hours: 3

Email bassforlunch@aol.com

Office Hours: WED TBA

Required Text: Recording Engineers Handbook, Bobby Owsinski; ArtistPro Publishing/Hal Leonard
Producing in the Home Studio with Pro Tools, David Franz; Berklee Press

CATALOG DESCRIPTION

An introduction to the fundamentals of audio recording, including traditional analog techniques as well as Digital hard-disk recording. Emphasis on DAW (digital audio workstation) function, microphone placement, mixing principles, production concepts, and project workflow. Basic MIDI principles will be implemented utilizing hardware and software (virtual instruments).

RATIONALE OF CATALOG DESCRIPTION

The student will gain a basic but thorough understanding of the audio recording process in the digital domain.

STUDENT LEARNING OUTCOMES

Upon successful completion of the course, the student will have the technical ability to:

- Set up and operate recording sessions
- Implement basic production skills
- Utilize basic ProTools recording techniques, such as sends, returns, and busses for recording through an effect
- Place microphones properly to capture superior sounds
- Record with reverb, delay, compression/expansion, and equalizer plug-ins
- Use all editing tools and modes in ProTools
- Use fades and crossfades
- Work with tracks, regions, and selections
- Edit between playlists
- Prepare edited audio tracks for mixdown

- MIDI set-up in the studio, with emphasis on hardware and software connection)
- Utilize virtual instruments, orchestral instruments, samples, sound effects and additional percussion

Special needs: If you have any learning disabilities, are alternately-abled in any manner, or feel that you need special dispensation, please contact the Office of Student Disabilities so that you may be accommodated.

COURSE REQUIREMENTS

1. Class attendance: Regular class attendance is imperative. Lesson and project materials are assigned and in some cases provided. Any student that misses 25% of the total classes per semester can automatically fail the course
2. **A thumb drive, minimum one gig.**
3. **Headphones, Earbuds... with a 1/8" (female) to 1/4" (male) adapter. (radio shack/bestbuy)**
4. A personal computer or regular access to a computer to practice skills
5. Examinations will be conducted periodically,, covering specific course information obtained through text and lecture.

Grading: Scheduled exams will contribute 60% towards the total grade, class participation 15%, and the final project/exam 25%

****** Any student found in unauthorized use of email/facebook/web-browsing during class will receive a reprimand for first offence, and a letter grade off of next exam for each subsequent offence. ******

Grading: Scheduled exams will contribute 60% of total grade, class participation 15%, and the final project/exam 25%.

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|-----|--|
| A = | 100-90 (mastery of techniques and concepts studied.) |
| B = | 89-80 (competent demonstration of techniques and concepts) |
| C = | 79-70 (average demonstration of techniques and concepts) |
| D = | 69-60 (below-average demonstration of techniques and concepts) |
| F = | 59- 0 (insufficient performance and effort) |

ADMINISTRATIVE AND CLASS REQUIREMENTS

Absences: - The following **excused** absences require documentation

1. incapacitating illness (note from a doctor or nurse);
2. official representation of UNCW (a signed notice from the supervising faculty);

3. death of a close relative (obituary notice or funeral program);
4. recognized religious holidays.
5. More than 10 absences (including two excused absences) results in a final grade of F.
6. Make-ups for excused absences (daily assignments & exams) must be completed

PRACTICE FACILITIES

Students are responsible for making time adequate to complete assignments.

Weeks 1 + 2

- 1) Introduction to Digital recording
- 2) Pro Tools anatomy and terminology PT, 4-10
- 3) Understanding “Workflow”
- 4) Basic session setup and gain structuring
- 5) PROJECT 1 set up basic inputs, I/O structure, and follow signal flow
- 6) Plug-in’s basic introduction

Weeks 2 + 3

- 1) Create new session and tracks.. numbering and naming.
- 2) Audio regions
 - a) whole file regions
 - b) user defined regions
 - c) auto-created regions
 - d) offline regions
 - e) multi-channel regions
- 3) Various record modes
 - a) non- destructive
 - b) destructive
 - c) loop record
 - d) quickpunch
- 4) Automated Punch-in
- 5) Playlists
 - a) edit
 - b) automation
- 6) click-track setup and value.

Weeks 4+5

- 1) Recording levels
 - a) signal to noise ratio
 - b) clipping.. analog and digital
- 2) Sample rate.... Memory required
- 3) Bit depth
- 4) Buffer settings
- 5) Latency
- 6) Conductor track
- 7) Import audio dialog box
- 8) Signal path
 - a) Sends
 - b) returns
 - c) busses
- 9) Setting up headphone mixes/cues
- 10) Conductor track
- 11) Markers and marker ruler

Weeks 6+7

EDITING

- 1) Non-destructive editing and edit playlists. PT 52-53
- 2) Edit tools PT 53-55
 - a) Selector tool
 - b) Grabber tool
 - c) Trimmer tool
 - d) Scrubber tool
 - e) Pencil tool
 - f) Zoomer tool
- 3) Edit modes PT 54
 - a) Shuffle
 - b) Spot
 - c) Slip
 - d) Grid
- 4) Tab to transients
- 5) Link Selections PT 56
- 6) Track views PT 56-57
- 7) Digital editing techniques PT 58-68
 - a) Creating new regions
 - b) Fades and Crossfades
 - c) Nudging
 - d) Waveform repair
 - e) Automation edits
 - f) Locking regions

Week 8

Midterm in-class projects

To be determined by instructor

Week 9-10

PRODUCTION

- 1) The producers role
 - a) The artist
 - b) Material
 - c) Project planning
 - d) Writing and arranging
 - e) Scheduling and rehearsing
 - f) Session preparation
- 2) Studio setup PT 117-120
- 3) Microphone placement/technique PT 120-123
 - a) Polar patterns
 - b) Phase issues
- 4) Track setup
- 5) Additional engineering skills
- 6) PROJECTS

Weeks 11-12

RECORDING VOCALS AND INSTRUMENTS

- 1) Microphone choice and placement PT 177-193
 - a) Drums; ambient, close miking, and beyond
 - b) Electric guitars and Basses
 - c) Acoustic guitars and Basses
 - d) Piano
 - e) Voice
 - f) Other instruments
- 2) Analyzing and quality control in sounds PT 195
- 3) Plug-ins
 - a) Pre-fader / post-fader
 - b) EQ
 - c) Reverb
 - d) Delay
 - e) Others
 - f) Using bussing
- 4) Printing effects PT 196
- 5) Headphone mixes (again) PT 196-198
- 6) Mixes
 - a) Submixes
 - b) Rough mixes
 - c) Bounce to disk

Weeks 13-14

POST PRODUCTION

- 1) Preparation
- 2) Listening and hearing, the difference
 - a) panning, height and depth PT 210-211
 - b) process
- 3) Track arrangement
- 4) Automation basics

FINAL PROJECT/EXAM