

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

MUS 214 001 Music: Recording Technology

CAB, 2041, WED 12:00-1:50

Instructor: Steve Bailey FALL 2011

Credit Hours: 3

Email: bassforlunch@gmail.com

Required Text:

Recording Engineers Handbook, 2nd Edition Bobby Owsinski; ArtistPro Publishing/Hal Leonard

Pro Tools 101, Official Courseware, pro tools 9.0 Frank Cook: Course Technology/Cengage

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 audio
- 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/usb drive, minimum four gigabyte. Or dedicated USB/Firewire Hard Drive
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. Practice computers (2) with interfaces are available in Wheelwright 208, during regular Wheelwright hours of operation.
5. Examinations will be conducted periodically,, covering specific course information obtained through text and lecture.

Grading: Scheduled exams will contribute 50% towards the total grade, class participation 25%, 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

GETTING TO KNOW PRO TOOLS Pages 3-25 PT101

Weeks 1 + 2

- 1) What is Pro Tools?
 - a) audio
 - b) midi
 - c) notation
 - d) mixing
 - e) Post-Production
- 2) Pro Tools story
 - a) Basics of Digital Audio
 - b) Waveform, Frequency, Amplitude
 - c) Recording and Playback
 - d) System Configs
 - e) Cross Platform Issues

GETTING INSIDE PRO TOOLS Pages 27-50 PT 101

- 3) File structure
 - a) Organization
 - b) Types of Files
- 4) Starting Pro Tools
 - a) Power up
 - b) Ilock
 - c) Launch
 - d) Optimizing Your System
- 5) Pro Tools Software Interface (GUI)
 - a) Menu Structure
 - b) Main Windows (edit/mix)
 - c) Tool Tips
- 6) Edit Tool Functions
 - a) Zoomer Tool
 - b) Trimmer
 - c) Selector

- d) Grabber
 - e) Scrubber
 - f) Pencil
 - g) Smart
- 7) Edit Mode Features
- a) Shuffle
 - b) Slip
 - c) Spot
 - d) Grid
 - e) Snap to Grid
- 8) Times Scales and Rulers
- a) Main Time Scale
 - b) Sub Time Scale
 - c) Ruler Display Options
- 9) Midi Control Features
- a) Wait for Note
 - b) Count-off Controls
 - c) Midi Merge Enable\
 - d) Meter Display
 - e) Tempo Field
 - f) Tempo Resolution Selection

WORKING WITH SESSIONS Weeks 3 + 4

CREATING YOUR FIRST SESSION Pages 61-75 PT 101

- 1) Creating and Configuring a Session
- a) Session Parameters
 - b) Creating the Session
 - c) Adding Tracks
 - d) Naming Tracks
 - e) Deleting tracks
 - f) Adding/importing Audio preview(dragging)
- 2) The Playback Cursor and Edit Cursor
- a) Playback Cursor
 - b) Edit Cursor
 - c) Setting Playback Point
 - d) Scrolling Options
 - e) Locating Playback Cursor
- 3) Saving, Locating, and Opening Existing Sessions

- a) Saving a Session
 - b) Locating and Opening
- 4) Essential Microphone Information (lecture and Owzinski text)
- a) Types of Mics
 - b) Polar Patterns
 - c) Phantom Power
 - d) Phasing
 - e) 3:1 Rule
 - f) Stereo Microphone Techniques (Basic)
 - g) Impedance
 - a) Other Input Sources

IMPORTING MEDIA pages 91-102 **PT 101**

- 1) Considerations
 - a) Bit Depth, Sample Rate, File Format
 - b) Configuring Stereo Files
- 2) Importing Audio
 - a) Import Dialog Box
 - b) Import Command
 - c) Digibase Browsers
 - d) Batch-Import
 - e) Import from CD
- 3) Import Video

SELECTING AND NAVIGATING pages 129-152 **PT 101**

- 1) Universe View
 - a) Resizing
 - b) Current View Indicator
 - c) Moving and Scrolling
- 2) Types of Selection
 - a) Timeline Selection
 - b) Edit Selection
- 3) Working with Selections
 - a) Separate Timeline and Edit Selections
 - b) Selections on Multiple Tracks
 - c) Selection In and Out Points
 - d) Tab Key
 - e) Tab to Transients

- 4) Adjusting Session View
 - a) Track Size
 - b) Track Order
 - c) Zoomer Tool
 - d) Zoom Toggle
 - e) Horizontal and Vertical Zoom
 - f) Zoom Presets

- 5) Markers
 - a) Memory Locations
 - b) Creating Markers
 - c) Memory Locations Window
 - d) Recalling Locations
 - e) Auto-naming Markers
 - f) Deleting Markers
 - g) Creating Selection Markers

TEST/PROJECT 1

BASIC EDITING TECHNIQUES pages 153-178 **PT 101** **Weeks 5-7**

- 1) Playback Options
 - a) Scrolling
 - b) Loop Playback

- 2) Using Edit Modes
 - a) Shuffle
 - b) Slip
 - c) Spot
 - d) Grid
 - e) Snap to Grid
 - f) Configuring Grid

- 3) Editing Regions
 - a) Standard Editing Commands
 - b) Pro-Tools Editing Commands

- 4) Moving and Trimming Regions
 - a) Grabber Tool Functions
 - b) Trim Functions
 - c) Nudge Functions

- 5) Creating Fade Effects
 - a) Fade-ins and Fade-outs

- b) Crossfades
 - c) Fade Settings
- 1) Undoing Work
 - a) Using Multi-Level Undo
 - b) Restore Last Selection
 - i) Revert to Saved

TEST/PROJECTs 2 +3 (pledge, numbers, etc)

FIRST AUDIO RECORDING Pages 77-90 **PT 101** **Week 8-9**

- 1) Objectives
 - a) Before Recording
 - b) Audio Storage
 - c) Disk Space Window
- 2) Preparing to Record
 - a) Creating Click Track
 - b) Check Connections
 - c) Record Enable Tracks
 - d) Input Path, Level, Pan
- 3) Recording and Managing Audio
- 4) Organizing After Recording
 - a) Return to Playback Mode
 - b) Organize Audio Files and Regions
 - c) Removing Audio Regions and Deleting

Instrumental Miking Owzinski

- 1) Microphone choice and placement
 - a) Drums; ambient, close miking, and beyond
 - b) Electric guitars and Basses
 - c) Acoustic guitars and Basses
 - d) Piano
 - e) Voice
 - f) Other instruments
 - g) Analyzing and quality control in sounds

TEST/PROJECT 4

MIDI RECORDING Pages 103-128 **PT 101** **Week 10**

Midi Basics

- 1) Midi in Pro Tools
 - a) Creating Midi Tracks
 - b) Sample-Based, Tick-Based
 - c) Time Scales and Rulers with Midi
- 2) Preparing to Record
 - a) Connection of Midi Device
 - b) Enabling midi Input
 - c) Testing Midi ins/outs
 - d) Record Enable Midi Tracks
 - e) Record Options
- 3) Using Virtual Instruments
 - a) Instanceing VI's
 - b) Xpand2
 - c) Boom
 - d) Structure
- 4) Setting Defaults for..
 - a) Default Meter
 - b) Default Tempo
 - c) Default Key Signature
- 5) RecordingMidi
- 6) Viewing Midi Data
 - a) Midi Regions View
 - b) Midi Notes View
 - c) Velocity View
 - d) Midi Editor Window Views

BASIC MIXING TECHNIQUES pages 179-194 **PT 101** **Weeks 11-12**

- 1) Mixer Terminology
 - a) Inputs
 - b) Outputs

- c) Inserts
 - d) Sends>Returns
- 2) Pro Tools Mix Window
 - a) Configuring the Mix Window
 - 3) Basic Automation
 - a) Recording Automation (modes)
 - b) Viewing and Editing Breakpoint Automation
 - c) Playing Back Automation
 - d) Turning Automation Off
 - 4) Real Time Plugins
 - a) Features
 - b) Formats
 - c) PT plugins
 - 5) AudioSuite Plugins
 - a) Gain
 - b) EQ
 - c) Pitch Shift
 - d) TEC
 - e) Others

FINISHING YOUR WORK Pages 195-212 **PT 101**
Weeks 13-14

- 1) Backing Up Session
 - a) Session Copy Saving
 - b) Sharing Sessions/Compatibility
- 2) Creating a Stereo Mixdown
 - a) Bouncing to Tracks
 - b) Bouncing to Disk
- 3) Burning Songs to CD
- 4) Create a CD with iTunes

FINAL PROJECT (s)