Computer Assisted Recording and Editing (MUIN 446a)
Course Syllabus, Fall 2015

Instructor

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Course Description

Computer Assisted Recording is an introduction to techniques and applications of recording sound on personal computers. Discussions will also include a study of the hardware and software required as well as editing music, dialog, and sound effects for song, commercials and film.

Requirements, Exams and Grading Information

Student evaluation in 446a will consist of practical assignments, quizzes and exams. The assignments include short exercises and a final project. In general, students will be given one week to complete and turn in exercises. Assignments turned in late will be lowered one grade per week and will not be accepted beyond three weeks late. All assignments must carefully follow file management and format guidelines. Instructions for the final project will be available at a later date.

Quizzes will be given weekly via BlackBoard and will cover reading and video assignments, as well as, instructor notes and handouts. The midterm exam will consist of both written and hands-on questions. The final will be a hands-on exam designed to test the practical skills developed during the semester. All exams and quizzes must be taken during the scheduled times and cannot be made up at a later date.

Attendance is taken each class and will count towards your final grade. After two absences your grade will be lowered one-half grade for each additional absence. Because of the importance of hands on experience with this subject, attendance to all classes is the only method of understanding the concepts of this specialized topic.

Grading Summary

1. Participation   10%
2. Quizzes   10%
3. Exercises   25% total
4. Midterm Exam   15%
5. Final Exam   20%
6. Final Project   20%

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GRADING SCALE

100 - 94	A
93 – 90	A-
89 - 87	B+
86 - 83	B
82 - 80	B-
79 - 77	C+
76 - 73	C
72 - 70	C-
69 - 67	D+
66 - 64	D
63 - 60	D-
Below 60	F

Class Materials

1. Textbook: "Pro Tools 101: An Introduction to Pro Tools" (required, available at bookstore and Amazon.com)
2. Lynda.com videos available through BlackBoard: *Pro Tools 11 Essential Training*; Foundations of Audio series: *EQs and Filters*; *Compressions and Dynamic Processing*; and *Reverb*, *Delay and Modulation*.
3. Pro-Tools Reference Guide (free download from http://avid.force.com/pkb/articles/en_US/User_Guide/en379111)
4. Instructor handouts and lecture notes (available on BlackBoard under Course Documentation)
5. Reference headphones are required and should be brought to all classes. All assignments will be evaluated using Sony MDR 7506 reference headphones!
6. USB Memory Stick or other external storage device!

Communication

Please make it a habit to use/check your USC E-mail account. Any E-mail I send to the class will use that account. ***Please add "446a" in the subject header of all email that you send me.*** This will help me to organize all the emails that I receive and enable me to respond to you more quickly. In addition, most course materials, quizzes and class grades will be posted on BlackBoard (http://blackboard.usc.edu). For example the course syllabus can be found under Syllabus, instructor handouts and project instructions under the Content tab. All exercise materials and instructions will be posted to the class folder (instructions on how to access this folder will be provided during week 2 and will be posted to Blackboard).

Disabilities

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.-5:00 p.m. Monday through Friday. The phone number for DSP is 213/740-0776.

Academic Integrity

Academic Integrity-Students are expected to adhere to the Academic Integrity Guidelines of USC as outlined in the current edition of SCampus. Work found to contain plagiarized or uncited materials will be referred to the USC Office of Student Conduct for review. Academic Integrity violations will result in a failing grade for submitted material and for the course, and dismissal from Thornton School of Music majors and minors.

***Please be advised anyone found surfing the web will be asked to leave the class. Before you can be readmitted to the class you must meet with the program chair.

Course Schedule

Week 1 - Class Introduction and Review
>   Native system setup
>   PTs Playback Engine and H/W buffer and system latency
>   Navigating a PTs session
>   Changing zoom level, track height, rulers, Edit window options
>   Playback and scrolling options
>   Making selections
>   PTs file types and management
>   Reading: 101 – 2 and 7
>   Exercise 1: Navigating the Edit Window (not for grade)

Week 2 - Audio Editing Review
>   Importing audio
>   Audio clip attributes and management
>   Separate, break, heal clip
>   Copy/paste, duplicate, repeat, loop, and loop trim clips
>   Clip trim, trim to insertion, trim from insertion
>   Conform clip to tempo
>   Fades: in/out, cross fade, equal power vs. equal gain
>   Reading: 101 – 5 and 8; *Pro Tools 11 Essential Training* chapters 3 and 6
>   Exercise 2: Audio Editing Basics

Week 3 - Recording Audio
      Creating PTs sessions: file types, sample rates, bit depth, I/O considerations
      Creating and naming tracks, track I/O, phantom power
      Setting record levels/gain structure
      PTs signal path, recording with a "pre-disk" aux track
      Click tracks, countoffs, tempo and meter
      Punch record and pre/post roll
      Monitoring options, Input Monitoring
      Introduction to volume editing/automation
      Reading: 101 – 3 and 4; *Pro Tools 11 Essential Training* chapter 4
      Exercise 3: Voice Over Recording and Editing

Week 4 - Working with Playlists and Alternate Takes
      Playlist overview
      Create, duplicate and delete playlist
      Switching playlists
      Playlist use and strategy
      Playlist view, comping tracks from multiple takes
      Crossfade use, issues and solutions
      Reading: Instructor handout
      Exercise 4: Playlist Comping Exercise

Week 5 - Vocal Editing and Tuning
      Comping vocal tracks
      Audio editing to enhance groove ("Pocketing")
      Melodyne vocal tuning setup and workflow
      Melodyne tools and functions
      Do and don'ts of vocal tuning
      Internal track bounce
      Vocal aligning background vocal tracks
      Reading: Instructor Handout
      Exercise 5: Vocal Editing and Tuning

Week 6 - Drum Sound Replacement and Enhancement
      Old school sound replacement
      Sample replacement with Sound Replacer
      Sample enhancement with Slate Trigger
      Strip Silence
      Audio editing to enhance groove ("Pocketing")
      Reading: Instructor Handout
      Exercise 6: Drum Sound Replacement and Enhancement

Week 7 - Mid-Term Exam

Week 8 - Plug-ins
      Adding and removing plug-ins
      Copying settings
      Recalling and saving presets
      Copying plug-ins
      Bypassing and inactivating plug-ins
      Multi channel and multi mono plugs
      Plug-in formats (AAX, RTAS, AU, VST, etc.)
      AudioSuite plug-ins
      Reading: Instructor handout; *Pro Tools 11 Essential Training* chapter 12
      Exercise 7: Using AudioSuite plugins

Week 9 - The Mix Window: Inserts, Sends and Groups
      Mix window overview
      Track signal path and routing
      Track inserts (series processing)
      Bus effects and sends (parallel processing)
      Creating headphone cues
      Prefader sends, using mono vs. stereo sends
      Solo safe
      Master fader track signal path and use
      Creating and using submixes
      Reading: 101 – 9
      Exercise 8: Insert, Sends, Bus Effects, and Submixing

Week 10 - Organizing the Mix
      Relinking source files
      Marker and none type memory locations
      Color coding tracks and markers
      Track groups
      Setting levels and pans
      Term Project Explanation
      Reading: Instructor handout

Week 11 - Signal Processing: EQ and Filters
      Timbre and the "magic frequencies"
      Filter shapes, parameters and use
      Parametric EQ parameters and use
      Basic applications of audio filters and equalization
      Reading: Instructor handout; Lynda.com *Foundations of Audio: EQ and Filters*
      chapters 2-3

Week 12 - Signal Processing: Compression
    Compression overview
    Compression parameters: threshold, ratio, attack/release, makeup gain
    Basic pop/rock applications of compression
    De-essers: parameters and use
    Other dynamic processors: limiters and noise gates
    Reading: Lecture Notes; Lynda.com *Foundations of Audio: Compression and Dynamic Processing* chapter 2

Week 13 - Signal Processing: Reverb and Delay; Graphic Automation
    Reverb: setup, parameters and application
    Creating a session tempo map, adding tempo markers
    Delay: setup, parameters and application
    Graphic automation basics
    Automation breakpoints, tools
    Create, edit, copy, paste and nudge automation
    Override automation
    Reading: Instructor handout, 101 – 09; Lynda.com *Foundations of Audio: Reverb* chapter 3, *Delay and Modulation* chapter 1, *Pro Tools 11 Essential Training* chapter 11

Week 14 - Bounce to Disk, File and Session Management
    Introduction to dither and noise shaping
    Bounce to disk, bounce "rules"
    Bounce parameters
    Clip management
    Archiving sessions
    Reading: Instructor handout, 101-10

Week 15 - Final Project progress check

12/06   Final project due 8pm in the course drop box on the course server

12/10   Final Exam, 2pm

*** Important Note! CSS G-147 will be closed as of 8pm on 12/08. There will be no open lab time after that date. There will be no exceptions to this policy so, please plan accordingly.