

# **Introduction to Audio Recording and Editing (MTEC 246) Course Syllabus - Online**

## **Important Registration Information**

**Enrolled or enrolling students are given ONLY the first week of instruction to add/drop an 8-week semester course.**

Please review these policies via Trojan online scheduling. No exceptions will be allowed.

## **Course Description**

MTEC 246 is an 8-week semester course presented via online and using USC Blackboard for curriculum distribution and assignment collection. The course will introduce techniques and applications of recording, editing and mixing of digitally produced sound on personal computers. Discussions will also include a study of current hardware and software required as well as standardized basic editing workflows and techniques of music, dialog, and sound effects for song, commercials and film.

## **Student Course Objectives:**

- Understand Current DAW Audio Music Technology
- Create and Configure a DAW Music Production Session
- Manage the Use of Main Tools, Windows and Displays
- How to Import Audio Files and Clips Basic Workflow Techniques
- Learn Workflows with Selections and Navigate a DAW Session
- Create Audio Clips and Edit Tracks in Music and Dialog
- Record Analog Microphone Signal of Dialog Audio into DAW Session
- Learn the Basic Use of Audio Loops in Music Production Process
- Signal Process Audio Using Mixing Channel and Plug-ins
- Learn to Create Stereo Mixes Within DAW and Bounce Options
- Know Industry Standard Basic File Asset Management DATA Protocols

## **Requirements, Exams and Grading Information:**

Student evaluation in MTEC 246 will consist of lesson reading evaluations, tests, practical lab assignments and participation via online portal. The lab assignments include short exercises. In general, students will be given one week to complete and turn in lab exercises and assignments. Assignments turned in late will be lowered one grade per week and will not be accepted beyond two weeks late. All assignments must carefully follow file management and format guidelines.

Final Course Test will be administered from Blackboard, consisting of multiple choice/answer and true/false questions. Quizzes and tests must be taken during the scheduled times and cannot be made up at later dates.

Course Participation will count towards your final grade. Non-completion of a module will lower one point for each additional non-participation.

**Grading Summary:**

<b>ITEM</b>	<b>Value</b>	<b>Grading Criteria</b>
1. Participation	8%	See Syllabus for details
2. Final Course Test	20%	Total questions possible/total % correct
3. Lab Exercises (9)	36%	Timely submission, complete as directed
4. Reading Q and A (9)	36%	Follow outline directions and timely submission

**Class Materials: *NEEDED FOR FIRST AND ALL CLASS MODULES***

1. Operational Pro Tools DAW system – recent version. Either Mac or PC.
2. Reference headphones are required and should be brought to all classes. Must have ¼” connector or adapter. No ear buds. **Do not use headphones with built-in microphones** such as for telephones (No four-pole connectors). All assignments will be evaluated using AKG 240M or Sony MDR 7506 reference headphones or professional studio monitoring system
3. Recommended – Interface, Microphone, Mic Cable, and Mic Stand

**Communication:**

Please make it a daily habit to use/check your USC E-mail account. Any E-mails sent to the class will use that account. \*\*\*Please add “246” in the subject header of all emails that you send instructor\*\*\* This will help instructor to organize all the emails received and respond to you more quickly.

**Blackboard:**

In addition all course materials and class grades will be posted on Blackboard (<http://blackboard.usc.edu>). For example the course syllabus can be found under Course Syllabus, Module information under Content, and exercise and project instructions under Assignments.

**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 the Music Industry Program for majors and minors.

---

## 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

## Course Schedule

(Schedule and Content Subject to Instructor Changes)

### Week 1 – Module 1 - Getting to Know Pro Tools

- ❖ Identify the advantages of recording and editing in the digital realm
- ❖ Recognize the contributions of historical developments in sampling and sound editing, MIDI technology, computer I/O, and recording technology to today's digital audio workstation
- ❖ Understand the relationship between sample rate and frequency response in digital audio
- ❖ Understand the relationship between bit depth and dynamic range in digital audio
- ❖ Recognize components and features of various Pro Tools systems
  - Exercise Lab 1 – Demo Session Operation
  - Reading Q and A

### Week 2 – Module 2 - Getting Inside Pro Tools

- ❖ Recognize the basic Pro Tools session file structure
- ❖ Power up a Pro Tools system
- ❖ Navigate the Pro Tools menu system to locate common commands
- ❖ Recognize and work in the main Pro Tools windows
- ❖ Recognize the Edit tools and Edit modes
- ❖ Recognize displayed Time Scales and Timebase Rulers
- ❖ Recognize MIDI controls
  - Exercise Lab 2 – Two Mix Edit
  - Reading Q and A

### **Week 3 – Module 3 – Creating First Session**

- ❖ Choose appropriate session parameters for a project
- ❖ Create and name tracks
- ❖ Recognize the difference between the playback cursor and the edit cursor
- ❖ Navigate your session for playback and editing
- ❖ Save, locate, and open sessions on available hard drives
  - Exercise Lab 3 – Creating a Session
  - Reading Q and A

### **Week 4 – Module 4 – Recording Audio**

- ❖ Set up Pro Tools hardware and software for recording audio
- ❖ Create and configure a click track
- ❖ Record audio onto tracks in your session
- ❖ Recognize clips and whole-file clips
- ❖ Organize your clips and audio files after recording to minimize clutter and optimize your session
  - Exercise Lab 4 – Making First Audio Recording
  - Reading Q and A

### **Week 5 – Module 5 – Importing and Working with Media**

- ❖ Determine whether an audio file's parameters are compatible with your session
- ❖ Understand how Pro Tools treats stereo files
- ❖ Understand the functions of each part of the Import Audio dialog box
- ❖ Import audio files to the Clip List or to Audio tracks in the Edit window
- ❖ Import video files to a Video track in the Edit window
  - Exercise Lab 5 – Importing Audio
  - Reading Q and A

### **Week 6 – Module 6 – Selecting and Navigating**

- ❖ Navigate a session with the Universe view
- ❖ Recognize the difference between a Timeline selection and an Edit selection
- ❖ Mark and adjust selection in and out points
- ❖ Use the Tab key to navigate a Track Playlist
- ❖ Adjust the session view for different needs
- ❖ Add, delete, and work with location markers
  - Exercise Lab 7 – Configuring the Session and Adding Markers
  - Reading Q and A

### **Week 7 – Module 7 – Basic Editing Techniques**

- ❖ Set options for scrolling and looping during playback
- ❖ Understand the Pro Tools Edit modes
- ❖ Recognize the difference between Absolute Grid mode and Relative Grid mode
- ❖ Configure Grid and Nudge values
- ❖ Use standard editing commands to modify your playlists
- ❖ Understand the effects of Edit modes on moving and trimming operations
- ❖ Create fade-in, fade-out, and crossfade effects on your tracks
  - Exercise Lab 8 – Editing Audio
  - Reading Q and A

### **Week 8 – Module 8A - Basic Mixing Techniques**

- ❖ Recognize common mixer terminology
- ❖ Configure inserts and send-and-return paths to add signal processing to your tracks
- ❖ Configure the Inserts and Sends views in the Mix window
- ❖ Record and edit basic automation for your mix
  - ❖ Add plug-ins to your tracks for internal effects processing and sound shaping
    - Exercise Lab 9 – Arranging Audio and Creating Shared Effects
    - Reading Q and A

### **Week 8 – Module 8B - Finishing the Work**

- ❖ Understand the purpose of the Save Copy In command and recognize situations in which you should use it
- ❖ Create a copy of your session for use on a different Pro Tools system
- ❖ Create a mixdown of tracks in your session by bouncing to tracks or bouncing to disk
- ❖ Select appropriate options for your bounced files when bouncing to disk
- ❖ Add your bounced files to your iTunes library
- ❖ Create an audio CD of your bounced files to share your results with others
  - Exercise Lab 10 – Recording Automation and Creating a Stereo Bounce
  - Reading Q and A