CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA
[CLASS]
[MUSIC]
Expanded Course Outline

Course Subject Area:	MU
Course Number:	**4270**
Course Title:	**Tracking and Mixing in Music Recording**
Units:	**3**
C/S Classification #:	**04**
Component:	**Lecture**
Grading Basis: (graded only, CR/NC only, student's choice)	**Graded only**
Repeat Basis: (may be taken once, taken multiple times, taken multiple times only with different topics)	**Taken once**
Cross Listed Course: (if offered with another department)	
Dual Listed Course: (if offered as lower/upper division or undergraduate/graduate)	
Major course/Service course/GE Course: (pick all that apply)	**Major course**
General Education Area/Subarea: (as appropriate)	
Date Prepared:	**3/31/15**
Prepared by:	**Arthur Winer**

I. Catalog Description

Advanced techniques for recording, editing and mixing music in a Pro Tools|HD digital audio workstation environment. Group projects exploring both historic and modern approaches to tracking and mixing. Advanced exploration of microphone and signal processing techniques.

II. Required Coursework and Background

Prerequisite: MU 328 or MU 3281

III. Expected Outcomes

1. Demonstrate knowledge of tracking and mixing functions.
2. Achieve a working knowledge of tracking and mixing procedures for a variety of musical groups ensembles and instruments.
3. Achieve a basic understanding of the scope, process and management of tracking and mixing sessions. Furthermore, to demonstrate these applied skills across platforms and formats.
4. Demonstrate a basic level of proficiency in administering tracking and mixing sessions in music production.
5. Completion of recording projects as assigned by the instructor.

The outcomes of this course relate to the following Music Department Student Learning Outcomes:

#2: Communicate effectively--verbally and in writing--about specific musical works and musicians, about the creative process in music, and about music's role in human culture.
#3: Demonstrate musicianship skills (including those involving technology) and conceptual understandings.
#5: Articulate a holistic understanding of the many influences on any musical endeavor (e.g., cultural, artistic, technological, economic, etc.).
#6: Develop specialized knowledge appropriate to the option or emphasis area.

BA in Music:
#3. **Communicate effectively**--verbally and in writing--about specific musical works and musicians, about the creative process in music, and about music's role in human culture.
#4. **Demonstrate** creativity, musicianship skills, an understanding of appropriate technology, and conceptual understandings.

BA in the MIS Option:
#1. **Interpret** relationships between music and: commerce; technology; media; and audience.
#2. **Articulate** fundamental understanding of entrepreneurship and standard music industry practices.

BM in Music:
#1. **demonstrate** a high level of musicianship that facilitates independent preparation of music for performance.
#2. **utilize** current/recent technologies appropriate to the musical endeavor.

IV. Instructional Materials

Huber, David Miles & Robert E. Runstein. *Modern Recording Techniques,* 6th Ed.
        New York: Focal Press, 2005.

Ikzahi, Roey. *Mixing Audio: Concepts, Practices, and Tools.* 2nd Ed. New York: Focal Press, 2012.

Langford, Simon. *Digital Audio Editing: Correcting and Enhancing Audio with DAWs.* New York: Focal Press, 2014.

Rumsey, Francis. *Desktop Audio Technology: Digital Audio and MIDI Principles.*
        New York: Focal Press, 2004.

Thompson, Daniel M. *Understanding Audio.* Boston: Berkelee Press, 2005.

V. Minimum Student Material

Headphones, blank CD-Rs, blank DVD-Rs,

VI. Minimum College Facilities

1. Control room/class room large enough to accommodate monitoring equipment, instructor and seated students. Avid ProTools HD hardware & software (or equivalent). Computer system compatible with recording hardware. Two hard drives. Two computer monitors. Internet access. Off-site server accessible via Ethernet for backing up audio data. Mixing console and/or digital audio workstation controller. Other signal processing equipment. Monitoring systems (speakers, amplifier and gain controller). Studio furniture including computer noise-isolation, equipment racks, speaker stands, console table, and chairs for instructor and students. Analog and digital cabling including patch-bay.
2. Separate tracking room large enough to accommodate four-piece ensemble (minimum). Guitar amplifiers, drum kit, and piano. Analog and digital cabling. Assorted microphone collection and microphone stands.
3. Blackboard (or equivalent) on-line site.

VII. Course Outline

1. Audio Basics examination to determine students' audio knowledge base.
2. Lectures and group project assignment on single-microphone recording & mixing techniques.
3. Lectures and group project assignment on multi-track recording & mixing techniques.
4. Lectures and group project assignment on live recording & mixing techniques.
5. Research paper and presentation.
6. Lectures and group project assignment on sound-alike recording & mixing techniques.

VIII. Instructional Methods

Classes will be taught via lecture, demonstration and hands-on student experiences.

IX. Evaluation of Outcomes

Audio Basics examination.
Hands-on group projects.
Research paper and presentation.