

College of San Mateo

Course Outline

- New Course
 Update/No change
 Course Revision (Minor)
 Course Revision (Major)

Date: October 8, 2010

Department: Digital Media

Number: 118

Course Title: Digital Audio Production

Units: 3

Total Semester Hours: Lecture: 48

Lab: 16

Homework: 80

By Arrangement: 0

Length of Course

- Semester-long
 Short course (Number of weeks _____)
 Open entry/Open exit

Grading

- Letter
 Pass/No Pass
 Grade Option (letter or Pass/No Pass)

Faculty Load Credit (To be completed by Division Office; show calculations): FLC 3.7

$$(48 \div 16) + (16 \div 16 \times 0.7) = 3.7$$

1. **Prerequisite** (Attach Enrollment Limitation Validation Form.)

None

2. **Corequisite** (Attach Enrollment Limitation Validation Form.)

None

3. **Recommended Preparation** (Attach Enrollment Validation Form.)

Eligibility for ENGL 838 or ENGL 848 or equivalent.

4. **Catalog Description**

118 Digital Audio Production (3) (Pass/No Pass or letter grade option) Minimum of 48 lecture hours and 16 lab hours per term. Recommended Preparation: Eligibility for ENGL 838/848 or equivalent. Students get hands-on experience in audio production and the basic operation of professional audio equipment. Covers basic microphone techniques, recording in the studio and field, radio programming, and broadcast production. Students will gain a practical understanding of digital audio recording, mixing, and editing. Includes an introduction to Pro Tools. (AA, CSU)

5. **Class Schedule Description** (Include prerequisites/corequisites/recommended preparation.)

118 Digital Audio Production (3) Get a sound education! Students get hands-on experience in audio production and the basic operation of professional audio equipment. Covers basic microphone techniques, recording in the studio and field, radio programming, and broadcast production. Students will gain a practical understanding of digital audio recording, mixing, and editing. Includes an introduction to Pro Tools. Recommended Preparation: Eligibility for ENGL 838/848 or equivalent. (Pass/No Pass or letter grade option) (AA, CSU)

6. **Student Learning Outcomes** (Identify 1-6 expected learner outcomes using active verbs.)

Upon successful completion of the course, the student will be able to:

1. Explain sound fundamentals and common audio aesthetics
2. Describe radio programming practices and the production needs of a radio station
3. Demonstrate ability to record
4. Demonstrate basic audio mixing
5. Demonstrate proper microphone selection and placement for various recording situations

7. **Course Objectives** (Identify specific teaching objectives detailing course content and activities. *For some courses, the course objectives will be the same as the student learning outcomes. If this is the case, please simply indicate this in this section).*)

Same as SLOs

8. **Course Content** (Brief but complete topical outline of the course that includes major subject areas [1-2 pages]. Should reflect all course objectives listed above. In addition, you may attach a sample course syllabus with a timeline.)

Attached

9. **Representative Instructional Methods** (Describe instructor-initiated teaching strategies that will assist students in meeting course objectives. Include examples of out-of-class assignments, required reading and writing assignments, and methods for teaching critical thinking skills.) **If hours by arrangement are required by this course, indicate the additional instructional activity which will be provided during this time.**

1. **Lecture** will introduce new material and concepts to the students and provide a survey of radio industry operational practices and programming. One half of the lecture time is done in a Smart classroom. This allows the instructor to use audio/visual examples and discuss overarching audio principles
2. **Demonstration:** the second half of lecture is done in the recording studio and audio labs to demonstrate the appropriate use of mics, and recording and mixing equipment
3. **Readings** will reinforce and/or supplement lecture information
4. **Production lab assignments:** lab time will be completed in audio labs in, where students will apply their learning in production assignments, using professional audio equipment and computer applications
5. **Studio recording assignments:** students will be required to set up and record a studio-based performance (controlled environment)
6. **Field recording assignments:** students will record natural sound and interviews in a uncontrolled environment
7. **Lessons in aesthetics:** assignments will include application of audio aesthetics
8. **Reflection essays** on audio production experience and self-assessment of skills

10. **Representative Methods of Evaluation** (Describe measurement of student progress toward course objectives. Courses with required writing component and/or problem-solving emphasis must reflect critical thinking component. If skills class, then applied skills.)

1. Exams on key information and concepts in audio production and radio programming
2. Hands-on testing of skills in microphone selection, set-up and placement, recording, and operating mixers
3. Oral presentation of ideas and expression of independent views
4. Participation in small group projects

5. Radio production assignments will be evaluated by instructor and assessed for improvement and skill mastery in recording, mixing, and editing

6. Informal writing in the form of critiques of radio programming

11. **Representative Text Materials** (With few exceptions, texts need to be current. Include publication dates.)

The Recording Engineer's Handbook by Bobby Owsinski
Course Technology PTR; 2 edition (January 20, 2009)

A free, online text has been adopted: <http://www.mediacollege.com/audio/>

MediaCollege.com is a free educational website containing tutorials, reference and other resource material in all areas of electronic media production.

MediaCollege.com Terms and Conditions: <http://www.mediacollege.com/home/terms.html>

Prepared by:

(Signature)

Email address:

Submission Date: _____

Outline of Course Content

Introduction to Sound (SLO 1)

- Hearing and sound perception
- Sound waves, properties, interaction
- Elements of sound
- Audio aesthetics

Radio Station Practices (SLO 2)

- Audio production for radio stations
- Audio for radio specifications
- Radio programming, station formats (a station's "sound")
- Radio today: internet radio, satellite radio, terrestrial broadcast, HD radio

Microphones (SLO 4)

- Transduction and diaphragms
- Types of Mics: dynamic, condenser, ribbon, crystal
- Directional Properties and pick up patterns
- Frequency Response
- Mic Level vs Line Level

Recording (*SLOs 3 & 4*)

- Analog to Digital
- Mic selection & positioning
- Acoustics
- Types of recording equipment and formats
- Studio recording
- Field recording
- Mastering

Mixers (*SLO 3*)

- Input Channels: Gain/Attenuation, Phantom Power, EQ, Aux, Pan, Solo, Slider
- VU Meter & PPM, monitoring
- Subgroups
- Outputs

Controlling sound (*SLO 3 & 4*)

- Distortion and Feedback
- Equalization
- Processing, Compression, Limiting, Expansion
- Audio Effects: Reverb, Phasing, Flanging, Chorus

Editing (*SLO 3*)

- Types of digital audio files
- Audio editing, making sound visual
- Audio editing software
- Cutting, Fading, Crossfades