

### Course Outline

**COURSE:** MCTV 6                      **DIVISION:** 10                      **ALSO LISTED AS:** THEA 6

**TERM EFFECTIVE:** Spring 2021                      **CURRICULUM APPROVAL DATE:** 02/09/2021

**SHORT TITLE:** INTRO AUDIO PRDTN

**LONG TITLE:** Introduction to Audio Production

| <u>Units</u> | <u>Number of Weeks</u> | <u>Type</u> | <u>Contact Hours/Week</u> | <u>Total Contact Hours</u> |
|--------------|------------------------|-------------|---------------------------|----------------------------|
| 3            | 18                     | Lecture:    | 2                         | 36                         |
|              |                        | Lab:        | 3                         | 54                         |
|              |                        | Other:      | 0                         | 0                          |
|              |                        | Total:      | 5                         | 90                         |

#### **COURSE DESCRIPTION:**

The theory and practice of audio techniques in radio, television, film and multimedia including acoustics, audio language and terms, signal flow, use of microphones, use of mixers and related audio production and digital recording equipment and the aesthetic aspects of sound mixing and post production. Students will be able to apply knowledge and gain hands-on experience recording, editing, mixing and mastering audio. This course has the option of a letter grade or pass/no pass. This course is also listed as THEA 6.

**PREREQUISITES:**

**COREQUISITES:**

**CREDIT STATUS:** D - Credit - Degree Applicable

**GRADING MODES**

L - Standard Letter Grade

P - Pass/No Pass

**REPEATABILITY:** N - Course may not be repeated

## SCHEDULE TYPES:

- 02 - Lecture and/or discussion
- 03 - Lecture/Laboratory
- 04 - Laboratory/Studio/Activity
- 047 - Laboratory - LEH 0.7
- 05 - Hybrid
- 71 - Dist. Ed Internet Simultaneous
- 72 - Dist. Ed Internet Delayed
- 73 - Dist. Ed Internet Delayed LAB
- 737 - Dist. Ed Internet LAB-LEH 0.7

## STUDENT LEARNING OUTCOMES:

1. Demonstrate knowledge of audio recording concepts and terminology including the sound wave, frequency/pitch, amplitude/loudness, phase and timbre. Understand audio theory, acoustics, and aesthetic aspects.

Measure of assessment: Written tests, class discussion, essay, journal entry

Year assessed, or planned year of assessment: 2007

2. Identify, explain and apply knowledge of the operational elements of a professional audio system including acoustics, microphone classification, placement and use, and the theory and practical use of analog and digital recording equipment and storage devices.

Measure of assessment: Lab collaborative projects, practical hands-on quizzes, journal entry

Year assessed, or planned year of assessment: 2007

3. Set-up and operate audio (microphones, head-sets, mixers, cables) safely and professionally for a variety of venues and productions.

Measure of assessment: Collaborative lab project, journal entry, practical tests.

Year assessed, or planned year of assessment: 2007

4. Demonstrate the use of audio equipment to record audio both in the studio and on location and edit, process and mix audio elements together into a finished program.

Measure of assessment: Lab Sound production project, journal entry, class discussion / critique.

Year assessed, or planned year of assessment: 2007

5. Record a live performance, demonstrating knowledge of digital recording audio techniques

Measure of assessment: Master recording project, written rationale, journal entries, oral presentation/critique

Year assessed, or planned year of assessment: 2007

6. Use and demonstrate digital post production audio techniques for TV/Film or media production.

Measure of assessment: Project design proposal, final project presentation / critique.

Year assessed, or planned year of assessment: 2007

## **CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS**

Curriculum Approval Date: 02/09/2021

### **DE MODIFICATION ONLY**

10 Hours

#### I. Principles of Audio

- A. Ears, Hearing and Listening,
- B. Physics and Psychophysics of Sound, Acoustics
- C. Occupations in Audio

-OBJECTIVES: The student will

...demonstrate knowledge of audio theory and acoustics.

...explain the components of sound wave,  
frequency, sound envelope

...define and explain acoustics as it applies to studio design.

-LAB: Tour of Studio, Theater & other performance & production facilities.

-Assignments: Read assigned chapters and websites.

Write Essays on topic of "Educated Ear"

Journal Entry describing: "Listening Habits"

Project: "How Loud is Loud?"

Research: Selected Audio Related Web sites.

20 Hours

#### II. Audio Equipment and applications

- A. Microphones
- B. Mixers & consoles
- C. Analog & Digital Recording,
- D. Signal Processing
- E. Loudspeakers & Monitoring

-OBJECTIVES: The student will

...setup microphones, mixers and consoles for a variety of performance presentations in a variety of venues.

...explain microphone pick-up patterns

...read and explain the meters, patching and operating modes of audio consoles

...demonstrate knowledge in using a wired and wireless microphone system.

...use standard accessories for professional microphones including:

twin conductor cables, XLR connectors, various stands and clips for microphone mounting.

-LAB: Mixer,

console and microphone set-up and demonstration for reinforcement applications in studio and performance facilities for music and theatrical performances and speakers.

-ASSIGNMENTS: Read assigned chapters

Write Essay: "Sound in Performance"

Journal Entry: "Sound Diary"

Projects: " Design a poster explaining Pickup patterns"

Produce a PSA (Public Service Announcement) and a Radio Segment with

voice over

Participate in audio set-up and controls for a live or live to tape interview.

20 Hours

### III. Studio Production & Field Production

#### A. Synchronization

1. Time Codes

2. Frame rates

#### B. Studio Production: Live and Live to Tape

1. Sound and the Speaking Voice

2. Miking speech in Radio or Podcasts

3. Miking speech Television Studio: Multicamera

4. Recording Speech

#### C. Field/Remote Production reinforcement of sound for a live audience

1. Miking a staged theatrical or speaking event.

2. Miking a Music Production: Close Miking,  
Drums, Acoustic Stringed

instruments, woodwinds, Brass, Electric Instruments, vocals

#### D. Field Production (ENG)

1. Microphones,

set-up and operating for news reports and interviews  
and sports

2. Recording Music in Television and miking Music in film

-OBJECTIVES: The student will

..design and participate in a setting up a multicamera taping in a  
television studio

..design and participate in setting up a multicamera remote taping of a  
theatrical or musical event.

..organize and set-up and operate a remote  
sports taping

..produce a radio or internet segment

..select and explain the choice of microphones for a video taping  
session in the

studio and in a remote location

..critique and evaluate the quality of sound for a taped news  
production

ASSIGNMENTS: Read assigned chapters.

LAB: Pre-production and production of News & Views Live or similar  
show.

Journal Entry: Describe the roles performed during the taping of  
selected production.

Project: Produce a video package for rolling in  
on a GAV TV production  
for broadcast.

Production of an internet podcast.

10 Hours

### IV. Sound Design: The Sound Designer

#### A. The Function of Sound: "Speech, Sound Effects, Music, Silence"

B. Functions of Sound in relation to Picture

C. Strategies in Designing Sound: "Script Analysis"

OBJECTIVES: The student will

...record sound for a film or video production.

...analyze a script to determine placement of sound effects and music for a production.

...explain how sound is used to create a desired emotional response from the audience

...review and evaluate techniques and aesthetic considerations of edited

samplings

-ASSIGNMENTS: Read assigned chapters and websites.

LAB: Linear: cut and splicing. Electronic Editing of Audiotape

Non-linear Editing Organizing the edit tracks

Review of digital sound

Research: Sound Editing

for video and internet

Writing: Critiques of Sound Design in film or television.

Write a creative Sound Design project proposal.

20 Hours

V. Postproduction Editing

A. Dialogue, Sound Effects and Music in Postproduction

B. Editing: Methods, Linear & NonLinear

C. Techniques & Aesthetic Considerations

D. Mixing

and Rerecording: Radio, Video, Film, Multimedia

E. Production Values: Evaluating the finished product.

OBJECTIVES: The student will

..edit sound for a film or video production

..use linear or non linear editing techniques for a radio or television segment

..evaluate the techniques and aesthetic decisions of an edited audio segment.

ASSIGNMENTS: Read assigned chapters and operating manuals.

LAB: Studio Editing project. Digital editing with Final Cut Pro., Introduction to Pro Tools, Sonic Fire.

Projects:

Add Audio track to assigned film segments.

Journal: Explain process and justify decisions of the completed audio track assignment.

2 Hours

Final Project: Demonstrates student's knowledge, skills level and abilities in audio production. Written evaluation and journal report.

Final evaluation.

Justification of Repeatability Hours:

The

students who repeats gains an expanded educational experience in skills or proficiencies by supervised repetition and practice within the class periods. The student who repeats audio production will take a leadership role in lab assignments and assigned projects by focusing on television, theatrical or musical productions or radio or podcasting each time the class is repeated. By repeating this course the student will progress to design and create projects which will demonstrate an increasing level of professional quality and skills in the field of audio production in a variety of venues. Included in content section.

#### **METHODS OF INSTRUCTION:**

A) Classroom lecture and technical demonstrations. B) Presentations and projects prepared and presented by students. C) Hands-on exercises in connecting and operating audio equipments in a variety of venues. D) Class discussions conducted in the form of production meetings. E) Collaborative project between students.

#### **OUT OF CLASS ASSIGNMENTS:**

Required Outside Hours: 68

Assignment Description: An original film or podcast.

Required Outside Hours: 40

Assignment Description: At least two audio mixes of previous projects. OUT OF CLASS ASSIGNMENTS:

#### **METHODS OF EVALUATION:**

Writing assignments

Percent of total grade: 25.00 %

25% - 45% Written homework; Reading reports; Essay exams; Term papers; Other: Journals/critiques/research

Problem-solving assignments

Percent of total grade: 10.00 %

10% - 15% Field work; Lab reports; Other: Design, set-up, operate remote audio venues.

Skill demonstrations

Percent of total grade: 40.00 %

40% - 50% Class performance; Field work; Other: Collaborative and individual audio projects

Objective examinations

Percent of total grade: 5.00 %

5% - 10% Multiple choice; True/false; Matching items; Completion

#### **REPRESENTATIVE TEXTBOOKS:**

Required Representative Textbooks

Stephane Elmosnino. Audio Production Principles: Practical Studio Applications. New York: Oxford University Press, 2018.

ISBN: ISBN-13: 978-0190699352

Reading Level of Text, Grade: 13 Verified by: Grant Richards

**ARTICULATION and CERTIFICATE INFORMATION**

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 200870

UC TRANSFER:

Not Transferable

**SUPPLEMENTAL DATA:**

Basic Skills: N

Classification: Y

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department: MCTV

CSU Crosswalk Course Number: 6

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: D

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000456140

Sports/Physical Education Course: N

Taxonomy of Program: 061000