#### MUSC 52 Course Outline as of Fall 2023

### **CATALOG INFORMATION**

Dept and Nbr: MUSC 52 Title: AUDIO FOR MULTIMEDIA

Full Title: Audio for Multimedia

Last Reviewed: 2/13/2023

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	3.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	3.00	Lab Scheduled	2.00	8	Lab Scheduled	35.00
		Contact DHR	1.00		Contact DHR	17.50
		Contact Total	5.00		Contact Total	87.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00 Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

### **Catalog Description:**

An intermediate- to advanced-level hands-on workshop in digital audio focusing on the production of master audio tracks for multimedia applications. Students will explore audio for video and film, audio for spoken word, non-linear audio for interactive media and video gaming, podcasting, postproduction techniques, and mastering.

# **Prerequisites/Corequisites:**

Course Completion of MUSC 50

### **Recommended Preparation:**

#### **Limits on Enrollment:**

#### **Schedule of Classes Information:**

Description: An intermediate- to advanced-level hands-on workshop in digital audio focusing on the production of master audio tracks for multimedia applications. Students will explore audio for video and film, audio for spoken word, non-linear audio for interactive media and video gaming, podcasting, postproduction techniques, and mastering. (Grade Only) Prerequisites/Corequisites: Course Completion of MUSC 50

Recommended:

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

**AS Degree:** Effective: Inactive: Area **CSU GE: Transfer Area** Effective: Inactive:

**IGETC:** Transfer Area Inactive: Effective:

**CSU Transfer:** Transferable Effective: Fall 2023 Inactive:

**UC Transfer:** Effective: **Inactive:** 

CID:

## **Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

## **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

- 1. Utilize a Digital Audio Workstation (DAW) to produce master audio tracks for multimedia applications including film, video, gaming, and podcasting.
- 2. Critically analyze and aesthetically evaluate audio for multimedia applications.

## **Objectives:**

At the conclusion of this course, the student should be able to:

- 1. Describe the various jobs and careers available in the Digital Audio industry.
- 2. Demonstrate hands-on proficiency with a DAW at an advanced level.
- 3. Explain the critical issues in the digital recording and broadcast of the speaking voice, including dialog, voice-overs, and narration.
- 4. Create, edit, and master digital audio content suitable for multimedia applications including video and film.
- 5. Create, manage, and integrate an audio asset list for interactive media and video gaming.
- 6. Assess and implement the technical processes involved in Internet audio delivery and podcasting.
- 7. Demonstrate the technical processes involved in audio postproduction.
- 8. Explain the mastering process.

### **Topics and Scope:**

Lecture-Related Topics and Scope:

- I. Overview of the Digital Audio Industry
  - A. Jobs and careers in Digital Audio
- B. Industry resources and organizations II. Audio for Spoken Word
- III. Audio for Video and Film

- A. Sound design
- B. Sound effects (SFX)
- C. Music underscoring
- D. Aesthetic issues in video/film audio
- IV. Synchronization and Transfers
  - A. Society of Motion Picture and Television Engineers (SMPTE) time code
  - B. MIDI-based synchronization
  - C. Proprietary synchronization systems
- V. Audio for Interactive Media and Video Gaming
  - A. Linear vs. non-linear audio
  - B. Data size budgeting
  - C. Asset list creation, management, and integration
  - D. Use of middleware
  - E. Dataflow programming for Interactive Audio
- VI. Creating Sound Effects for Multimedia
- VII. Internet Production
  - A. Data transfer networks
  - B. Fidelity and digital file formats
  - C. Acoustic masking (perceptual coding)
  - D. Online collaborative recording
  - E. Podcasting
- VIII. Postproduction
  - A. Advanced editing
  - B. Music mixing
  - C. Surround sound
  - D. Premixing and rerecording for TV and film
  - E. Mastering
  - F. Evaluating the finished product
- IX. Synthesis in Sound Design
  - A. Layering real world SFX with synthesized sound
  - B. Styles of design
- X. Best Practices for Productions

# Laboratory-Related Topics and Scope:

- I. Advanced-Level Usage of the DAW
- II. Creating, Managing, and Integrating Audio Asset Lists for Interactive Media and Video Gaming
- III. Producing a Final Mixdown for Various Platforms
- IV. Digital Audio Projects such as:
  - A. Producing radio spots with music beds, voice-overs, and SFX
  - B. Scoring short films with music and SFX
  - C. Producing podcasts and preparing audio for online delivery
  - D. Building a MIDI/RIFF file to video game spec
  - E. Copying a film score texture
  - F. Organizing a personal SFX library following accepted naming conventions
- V. Mastering a Final Mix to Industry Standards

# **Assignment:**

# Lecture and Lab-Related Assignments:

- 1. Reading (10-20 pp. per week) from the text, handouts, and/or online tutorials
- 2. Hands-on proficiency demonstrations (3-5) on the applicable hardware and software

- 3. Quiz(zes) (1-3) on course topics (multiple choice/short answer/essay as needed)
- 4. Digital audio projects (4-5) based on the laboratory topics above, with a peer review process
- 5. Final digital audio project designed in consultation with the instructor

## Lab-Related Assignments:

1. Completion of required laboratory hours

#### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

Writing 0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Digital audio projects

Problem solving 40 - 55%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Hands-on proficiency demonstrations

Skill Demonstrations 25 - 35%

**Exams:** All forms of formal testing, other than skill performance exams.

Quiz(zes)

Exams 10 - 25%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation; lab hours

Other Category 5 - 10%

# **Representative Textbooks and Materials:**

**Online Tutorials:** 

Groove3.com (all-access pass)

Text:

Audio in Media. 10th ed. Alten, Stanley R. Wadsworth/Cengage. 2013 (classic).

Other online resources such as:

Audio Engineering Society (http://www.aes.org/)

Interactive Audio Special Interest Group (http://www.iasig.org/)

Periodicals such as: Mix Magazine, Electronic Musician Magazine

Instructor prepared materials.