

Course Title:	Audio Technology III
Department:	Career Technical Education
Course Number:	7961
Grade Level/s:	11 & 12
Length of Course:	Year
Prerequisite/s:	Successful completion of Audio Tech I and Audio Tech II or teacher recommendation
UC/CSU (A-G) Req:	(G) Elective

Brief Course Description: Audio Technology III is a capstone course of the audio technology pathway. This course will explore the various elements of the recording industry and entertainment management. Students in this course will further examine the aspects of music production and live sound reinforcement with an emphasis in management of the various production elements. Topics covered will include production design, event operations, entertainment & media marketing and media distribution. Students taking this hands-on class will become actively involved in all major productions on campus and in the community.

I. GOALS

The student will:

- A. Demonstrate their ability to organize visual elements across digital media and design applications (A1.0, A1.7)
- B. Apply artistic skill and processes to solve a variety of industry relevant problems (A2.0, A2.2, A2.5, A2.9)
- C. Analyze and assess the impact of history and cultural influences of media products (A3.1, A3.3)
- D. Assess and identify the use of technology in the principles of design and how it relates to industry standard equipment (A4.1, A4.5, A4.6)
- E. Create a career specific plan (A5.1, A5.2, A5.4, A5.6)
- F. Understand technical and technological requirements and how it impacts your skill set (A8.1, A8.2, A8.3, A8.7)
- G. Demonstrate knowledge of AME Industry Safety Standards (C1.0, C1.1, C1.2, C1.3, C1.4)
- H. Understand the technical support functions of live productions (C2.0, C2.1, C2.2, C2.3)
- I. Analyze and differentiate the function of the members of the production team (C3.0, C3.1)

Course Title: Audio Tech III

- J. Understand and execute the responsibilities of production planning (C4.0, C4.1, C4.2, C4.3, C4.5)
- K. Apply knowledge of services and equipment capabilities to complete a project in a timely manner (C5.0, C5.2)
- L. Understand and demonstrate various media production, communication and dissemination techniques and methods including written, oral, visual and electronic media (C7.1, C7.5, C7.6)

II. OUTLINE OF CONTENT FOR MAJOR AREAS OF STUDY

Semester 1

- A. Course Introduction
 - 1. Course objectives and instructor expectations
 - 2. Industry safety (rigging, electrical, SPL, PPE)
 - 3. Study of historical, cultural and economic significance
- B. The Production Process
 - 1. General production process
 - 2. Creating audio content for consumption by targeted audience
 - 3. Identify various audio peripherals
 - 4. Complete signal path
 - 5. Identify a production schedule
 - 6. Understanding the responsibility of a Production Director
- C. Cliental Operations
 - 1. Effectively communicate with potential clients
 - 2. Interpret the needs of a client
 - 3. Develop a production plan to produce a real event
- D. Broadcast Audio
 - 1. Effectively setup and operate wireless RF technology
 - 2. Effectively setup and operate digital mixing console
 - 3. Effectively integrate and incorporate audio with to video signal path
 - 4. Effectively setup and operate digital audio network solutions with Fiber, Ethernet Coaxial with Analog equipment
 - 5. Produce commercial quality audio for live broadcast
- E. Studio Audio Production
 - 1. Execute use of signal flow from microphone to speaker
 - 2. Setup, program and use of Digital Audio Interfaces with a Digital Audio Workstation (DAW)
 - 3. Effectively capture commercial quality sound for mixing and mastering
 - 4. Executive proper microphone selection and placement for various studio instruments

Semester 2

- A. Concert Audio Production – Live Mixing
 - 1. Effectively setup and organize mixing console
 - 2. Maintain cable management
 - 3. Internal input patching and signal routing
 - 4. Properly deploy speaker placement
 - 5. Effectively execute gain structure
 - 6. Effectively use on-board effects processors (Dynamic and Time based)
 - 7. Understand importance of “sound check” and 5 points of audio

- B. Event Design
 - 1. Effectively collaborate with clients as to their needs
 - 2. Utilize visualization software to create 3D renderings of the proposed event
 - 3. Understand proper speaker placement
 - 4. Understand room access, rigging points and room limitations, i.e., rigging, loudness levels, and the effects of room dimensions
 - 5. Effectively determine the equipment needs to properly execute the production needs of an event

- C. Event Management
 - 1. Effectively communicate with your production team
 - 2. Properly develop a production timeline and schedule crew to meet production needs
 - 3. Work collaboratively across disciplines with video, lighting and construction type crews

- D. Audio Recording Contests
 - 1. Understand time management to meet submission deadlines
 - 2. Critically analyze submission criteria to produce optimum outcome
 - 3. Develop material for a “work portfolio”

- E. Career Planning
 - 1. Create a one-page cover letter
 - 2. Create a one-page resume
 - 3. Completion of a job application
 - 4. Conduct job searches and locate industry related internet job portals

III. ACCOUNTABILITY DETERMINANTS

- A. Key Assignments
 - 1. Students will take and achieve a 100% score on an administrator-approved safety test and create a safety checklist for the class production activities that meets expected criteria outlined by the instructor’s rubric.
 - 2. Students will produce a live recording/broadcast to include production scheduling, equipment determination, crew scheduling

Course Title: Audio Tech III

- (use of Celtx), pre-production design (use of Capture), and live mix the event on a digital work surface.
3. Students will create and submit a project questionnaire to the prospective client.
 4. Students will create a written business proposal to include a written and visual presentation, whose contents include outlining scope of services equipment to be used. This proposal will include, but will not be limited to, a crew list, a list of expenses, pre-production materials, production needs, and production schedule and complete “day-of” operations.
 5. Students will participate as an A1 (head audio engineer) in the production of a live sports broadcast. They will be responsible for organizing and assembling a production team to assist in a full-scale sports broadcast. Their key objective is to live mix a sports broadcast with a professional quality audio signal integrated with the video production team for final routing to the internet webcast and/or live television broadcast.
 6. Students will seek local talent to collaborate with and produce a single song from start to finish. Utilizing a questionnaire, they will discover the artist’s vision for the song in which they will interpret and execute in the production. They will create a studio and production schedule listing timelines for recording, editing and mastering. The song will consist of a minimum of 16 total audio tracts, 2 effects processors and be mastered and prepared for distribution.
 7. Students will engage in a “virtual sound check” utilizing their gained knowledge. This process will take them through the wiring, patching, assigning, labeling, capturing and processing a “live” 16-channel performance. The 10-minute timed sequence will require all of the above while answering questions from the instructor regarding their decisions.
 8. Students will utilize Capture 2018 or newer to create a visual representation of a prospective event. In collaboration with a student group such as ASB or Drama, the student will listen to the needs of the group and develop a basic understanding of the event needs. They will utilize a questionnaire that gathers needed information. In addition, students will do a venue, “walk-through” to include: scaled drawing of venue with elements related to staging, lighting, truss, rigging, and detailed visuals for sound including, speakers, stands, cables, power location, cable runs, FOH and Monitor Mix positions etc.
 9. Students will create and submit a production timeline to the teacher and lead team members for a production of their choice. Students will create a timeline to include written and visual elements as needed. The timeline content includes outlining scope of services, equipment, crew schedule, venue layout and day of schedule.
 10. Students will locate and enter a local digital arts festival of their instructor’s choosing. This festival piece will be added to their portfolio as a demonstration piece of their skills.

Course Title: Audio Tech III

11. Students will generate a one-page cover letter and resume as part of a job application. This cover letter and resume will be included with a resume and submitted to a potential business for employment. Students will generate a one-page follow up letter as part of a job application. Students will not be assessed based on the outcome of the submission.
12. Students will participate in a mock interview with the instructor regarding their submitted cover letter, resume and follow up letter. In the mock interview, students will explain what qualifications and skills they possess for this position.

B. Assessment Methods

1. Skills mastery and quality of work
2. Portfolio
3. Tests and quizzes
4. Projects
5. Presentations
6. Research and project development
7. Performance tasks
8. Application paperwork and mock interview

IV. INSTRUCTIONAL MATERIALS AND METHODOLOGIES

A. Required Textbook(s)

Title: Recording and Producing Audio for Media
ISBN: 9781435460652
Format: Print
Author(s): Alten, Stanley
Publisher: Cengage Learning
Year: 2011
Additional Info:

B. Supplementary Materials

1. iMac computers
2. Software
3. Concert sound system
4. Digital broadcast and live concert-mixing console
5. Microphone assortment
6. Digital audio cable and components
7. Mobile recording equipment
8. Sports broadcasting communication systems
9. Online/web resources such as youtube.com and Lynda.com

C. Instructional Methodologies

1. Guided inquiry
2. Direct instruction
3. Cooperative learning
4. Colloquy
5. Critiques
6. Discourse
7. Problem based learning

Course Title: Audio Tech III

8. Hands on experiential learning
9. Role playing and simulation
10. Visual representations and concrete models
11. Field trips/research
12. Professional interviews