STRANDS AND STANDARDS
DIGITAL AUDIO 2

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CTE®

Course Description

Digital Audio 2 is an advanced course designed to build upon the foundational knowledge gained in Digital Audio 1. This course expands upon concepts introduced in the introductory course and delves deeper into the intricacies of digital audio production, offering students an opportunity to refine their skills and explore more complex techniques.

Building upon the fundamentals covered in Digital Audio 1, students in Digital Audio 2 will explore advanced topics such as sound synthesis, advanced editing techniques, sound reinforcement, and live sound production. Through a combination of theoretical study and hands-on practice, students will deepen their understanding of digital audio technologies and workflows.

The course will focus on advanced recording techniques, including multi-track recording, live recording sessions, and remote recording setups. Students will learn how to optimize recording environments, manage multiple audio tracks, and achieve professional-quality recordings in various contexts.

In Digital Audio 2, students will also delve into the art of sound mixing and mastering, learning advanced mixing techniques, signal processing, and mastering principles. They will explore the nuances of equalization, compression, reverb, and spatial effects, gaining the skills needed to create polished, professional-grade audio mixes.

Intended Grade Level	10-12
Units of Credit	0.5
Core Code	40.01.00.00.045
Concurrent Enrollment Core Code	40.01.00.13.045
Prerequisite	Digital Audio 1
Skill Certification Test Number	817
Skill Certification Cut Score	**70%**
Test Weight	0.5
License Area of Concentration	CTE and/or Secondary Education 6-12
Required Endorsement(s)	
Endorsement 1	Audio Video Production

STRAND 1
Students will fill the role and responsibilities of one or several of the following job titles.

Standard 1
Students will explore/identify job titles in the audio industry
- Recording Engineer
- Front of House (FOH) Engineer
- Mixing Engineer
- Music Producer
- Monitor Engineer
- Theatrical Engineer
- Mastering Engineer
- Foley Artist
- SFX Designer

Standard 2
Students will produce one or more of the following projects.
- Live music performance
- Recording a studio album or EP
- Podcasts
- Soundtrack and foley for a film or TV Show
- Audio commercial
- Audio book

STRAND 2
Students will demonstrate correct use of audio recording equipment and develop a recording workflow.

Standard 1
Demonstrate Digital Audio Workstation (DAW) workflow.
- File/Asset Management
- Session Organization
- Create project
- Import audio files
- Manage multiple sources/tracks of audio
- Export audio
- Export types (MP3, AIFF, WAV, FLAC)

Standard 2
Identify elements of audio.
- Decibel
- Clipping
- Reverb
- Panning
- EQ
  - High-pass filter
  - Low-pass filter
  - Bell/Peaking
  - High-Shelf
  - Low-Shelf

Standard 3
File Types & Digital Compression
- Lossy - reducing the file size by reducing audio quality
  - MP3
  - AAC
- Lossless - full audio quality, larger file size
  - FLAC
  - WAV
  - AIFF

STRAND 3
Students will demonstrate proper setup and use of recording equipment.

Standard 1
Identify various types of audio equipment.
- Analog Mixer - non programmable
- Digital Mixer - programmable
- DI Box - used to convert an instrument cable (unbalanced) into an xlr output (balanced)
- Snake and Stage Boxes - Equipment that allows you to run multiple audio inputs through a single cable to your mixer

Standard 2
Students will Identify common microphone pickup patterns.
- Cardioid
- Hyper-Cardioid
- Omnidirectional
- Bidirectional/Figure 8
- Shotgun

STRAND 4
Students will assemble a portfolio, including a resume, demonstrating various skills related to audio production.

Standard 1
Explore audio production.
- Apply for an internship
- Help someone setup equipment for a show or studio recording
- Learn how to use a piece of equipment you have never used before
- Using any equipment available, record interesting sounds in your classroom or neighborhood

STRAND 5

Students should collaborate and produce different types of audio.

Standard 1

Publication Selection – Students will identify the proper distribution outlet that is best suited for their content.
- Spotify
- Apple Music
- YouTube
- SoundCloud
- Social Media

Standard 2

Based on classroom resources, students should select a distribution platform and work together to produce one or several of the following:
- Produce a multiple episode podcast
- Produce the audio and soundtrack for a film
- Produce a studio album or EP
- Produce a live music concert

STRAND 6

Students will be able to understand and obey basic copyright laws applicable to all media.

Standard 1

Practice correct usage of copyright laws.
- Right to reproduce, manipulate and distribute
- Plagiarism

Standard 2

Licensing/Royalties
- PRO (Performance Rights Organizations)
  - ASCAP
  - BMI
  - SESAC

STRAND 7

Students will understand the importance of career readiness skills as it relates to participating in either TSA, SkillsUSA, Utah Broadcast Awards, or any other approved event.

Standard 1

- Participate in a CTSO competitive event related to audio
- Plan for your future career
- Apply for internships with recording studios
- Identify the components of an employment portfolio
- Complete a survey for employment opportunities
- Create a job application
- Assemble your employment portfolio
- Interview someone who is working in your field of interest

Performance Skills:

Students should assemble a portfolio demonstrating equipment use and management, recording skills, basic editing, and publishing high quality audio.

Workplace Skills:

The following workplace skills should be discussed and modeled throughout the strands and standards of the course:

- Communication
- Teamwork
- Critical and Creative Thinking
- Problem Solving
- Dependability
- Legal Requirements and Expectations

Skill Certification Test Points by Strand

Test Name	Test #	Number of Test Points by Strand										Total Points	Total Questions
		1	2	3	4	5	6	7	8	9	10		
Digital Audio 2	817	2	8	7	3	1	1					22	15