

Digital Audio 2

Exam Information

Description

Exam number

817

Items

17

Points

24

Prerequisites

Digital Audio 1

Recommended course length

One semester

National Career Cluster

Arts, A/V Technology, & Communications

Performance standards

Included (Optional)

Certificate available

Yes

The Digital Audio 2 industry certification exam assesses advanced knowledge in digital audio production. Learners are evaluated on their understanding of sound synthesis, advanced editing techniques, sound reinforcement, and live sound production. The exam covers advanced recording techniques, including multi-track recording, live recording sessions, and remote recording setups. It tests learners' knowledge of how to optimize recording environments, manage multiple audio tracks, and achieve professional-quality recordings. Additionally, the exam assesses the learner's knowledge of advanced mixing and mastering skills, including signal processing, equalization, compression, reverb, and spatial effects, ensuring learners know how to create polished, professional-grade audio mixes.

Exam Blueprint

Standard		Percentage of exam	
1.	Job roles & responsibilities	8%	
2.	Developing workflows	33%	
3.	Equipment setup & use	38%	
4.	Portfolio development	13%	
5.	Collaboration & production	4%	
6.	Copyright laws	4%	
7.	Career readiness	0%	

Standard 1

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

Objective 1 Students will explore/identify job titles in the audio industry.

- 1. Recording Engineer
- 2. Front of House (FOH) Engineer
- 3. Mixing Engineer
- 4. Music Producer
- 5. Monitor Engineer
- 6. Theatrical Engineer
- 7. Mastering Engineer
- 8. Foley Artist
- 9. SFX Designer

Objective 2 Students will produce one or more of the following projects.

- 1. Live music performance
- 2. Recording a studio album or EP
- 3. Podcasts
- 4. Soundtrack and foley for a film or TV Show
- 5. Audio commercial
- 6. Audio book

Standard 1 Performance Evaluation included below (Optional)

Standard 2

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

Objective 1 Demonstrate Digital Audio Workstation (DAW) workflow.

- 1. File/Asset Management
- 2. Session Organization
- 3. Create project
- 4. Import audio files
- 5. Manage multiple sources/tracks of audio
- 6. Export audio
- 7. Export types (MP3, AIFF, WAV, FLAC)

Objective 2 Identify elements of audio.

- 1. Decibel
- 2. Clipping
- 3. Reverb
- 4. Panning
- 5. EQ
 - a. High-pass filter
 - b. Low-pass filter
 - c. Bell/Peaking
 - d. High-Shelf
 - e. Low-Shelf

Objective 3 File Types & Digital Compression

1. Lossy - reducing the file size by reducing audio quality

- a. MP3
- b. AAC
- 2. Lossless full audio quality, larger file size
 - a. FLAC
 - b. WAV
 - c. AIFF

Standard 2 Performance Evaluation included below (Optional)

Standard 3

Students will demonstrate proper setup and use of recording equipment.

Objective 1 Identify various types of audio equipment.

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

Objective 2 Students will Identify common microphone pickup patterns.

- 1. Cardioid
- 2. Hyper-Cardioid
- 3. Omnidirectional
- 4. Bidirectional/Figure 8
- 5. Shotgun

Standard 3 Performance Evaluation included below (Optional)

Standard 4

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

Objective 1 Explore audio production.

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

Standard 4 Performance Evaluation included below (Optional)

Standard 5

Students should collaborate and produce different types of audio.

Objective 1 Publication Selection – Students will identify the proper distribution outlet that is best suited for their content.

1. Spotify

- 2. Apple Music
- 3. YouTube
- 4. SoundCloud
- 5. Social Media

Objective 2 Based on classroom resources, students should select a distribution platform and work together to produce one or several of the following:

- 1. Produce a multiple episode podcast
- 2. Produce the audio and soundtrack for a film
- 3. Produce a studio album or EP
- 4. Produce a live music concert

Standard 5 Performance Evaluation included below (Optional)

Standard 6

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

Objective 1 Practice correct usage of copyright laws.

- 1. Right to reproduce, manipulate and distribute
- 2. Plagiarism

Objective 2 Licensing/Royalties

- 1. PRO (Performance Rights Organizations)
 - a. ASCAP
 - b. BMI
 - c. SESAC

Standard 6 Performance Evaluation included below (Optional)

Standard 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.

Objective 1

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

Standard 7 Performance Evaluation included below (Optional)

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Digital Audio 2

Performance assessments may be completed and evaluated at any time during the course. The following
performance skills are to be used in connection with the associated standards and exam. To pass the performance
standard the student must attain a performance standard average of 8 or higher on the rating scale. Students may
be encouraged to repeat the objectives until they average 8 or higher.

Student's Name:	 	
Class:	 	

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Performance standards rating scale

0 Limited skills 2 \rightarrow 4 Moderate skills 6 \rightarrow 8 High skills 10

Performance Skills Score:

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

Workplace Skills

Score:

- The following workplace skills should be discussed and modeled throughout the standards and objectives of the course:
 - communication
 - o teamwork
 - critical and creative thinking
 - o problem solving
 - dependability
 - legal requirements and expectations

Performance standard average score:

Evaluator Name:	
Evaluator Title:	
Evaluator Signature:	
Date:	

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