

STRANDS AND STANDARDS

DIGITAL AUDIO 1



Course Description

This course is designed to provide students with the basic knowledge and skills related to audio broadcasting and audio production. The course includes instruction and hands-on assignments in the following areas: radio, TV, podcasting, live sound, studio recording and producing. Students will create original content through hands-on assignments.

Intended Grade Level	10-12
Units of Credit	0.5
Core Code	40.01.00.00.040
Concurrent Enrollment Core Code	N/A
Prerequisite	None
Skill Certification Test Number	816
Test Weight	0.5
License Area of Concentration	CTE and/or Secondary Education 6-12
Required Endorsement(s)	
Endorsement 1 or	Audio Video Production
Endorsement 2	Multimedia

STRAND 1

Students will understand the different types of audio production.

Standard 1

Students will understand, at least, these types of audio production:

- AM/FM radio show
- Live sports broadcasts
- An episodic podcast
- Series of related video blogs
- Live music performance
- Recording a studio album or EP
- Video blogs
- Soundtrack and foley for a film or TV Show
- Live music concert

STRAND 2

Students will identify and demonstrate proper use of equipment and when to use it.

Standard 1

Identify different microphone diaphragm types (Transducers).

- Condenser
 - Phantom Power
- Dynamic
- Ribbon
- Lavalier
- Shotgun
- Handheld

Standard 2

Identify different microphone pickup patterns.

- Omnidirectional
- Bidirectional
- Unidirectional
- Cardioid
- Hypercardioid

Standard 3

Demonstrate proper microphone selection and placement for different audio recording situations.

- Dialogue (Radio show, sports broadcast, podcast, narration)
- Sound Effects
- Music Performance
- Instrument Recording
- Ambient Recording
- Stereo Miking Techniques
- Miking 3 to 1 rule

STRAND 3

Students will demonstrate an understanding of audio signal-path.

Standard 1

Students will demonstrate proper equipment setup for recording audio

- Inputs
- Pre-amp
- Interfaces/Recording devices
- Outputs
- SNR
- Pop filter

Standard 2

Students will demonstrate audio mixing using a mixing board or DAW (Digital Audio Workstation).

- VU Meter
 - Clipping / Peaking
- Panning
- Compression
- Threshold
- Distortion
- Reverb

Standard 3

Identify various types of audio cables and connectors.

- ¼"
- ⅛"
- RCA
- MIDI
- XLR
- TRS
- TS
- Balanced
- Unbalanced

Standard 4

Students will identify common audio file types.

- MP3
- WAV, AIFF
- FLAC
- Sample Rate
- Bit Depth

STRAND 4

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

- YouTube
- SoundCloud
- Twitch
- TikTok
- Instagram
- Snapchat
- iTunes
- FM Radio
- AM Radio
- Vimeo

Standard 2

Pre-production and Planning: Students will plan and write content for various distribution outlets.

- Design and block out a Podcast, Radio Show or Live Performance
- Identify News Writing
- Identify Opinion Writing
- Identify commercial writing or call to action

Standard 3

Based on classroom resources, students should explore different types of audio and radio productions:

- Radio show
- Live sports broadcasts
- Episodic podcast
- Series of related video blogs
- TV/Film soundtrack production
- Recording studio album or EP
- Live music concert
- Foley sounds

STRAND 5

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

Standard 1

Students will be able to:

- Define copyright.
- Understand copyright in the age of YouTube.

STRAND 6

Students will understand the importance of career readiness skills as it relates to participating in either TSA (Technology Student Association), SkillsUSA, Utah Broadcast Awards or any other related CTSO.

Standard 1

Students will be aware of possible job titles in the audio industry:

- Audio Engineer
- Audio Producer
- Foley Artist
- Talent
- Audio Technician
- Sound Designer
- Etc.

Standard 2

Students will understand the basics of a job related to audio.

- Watch a documentary on someone who succeeded in this industry and develop a three to five-minute presentation.
- Interview someone who works in the field you would like to work in. Develop a three to five-minute presentation.
- Job shadow a person who works in the field you would like to work in.

Performance Skills

Students can record clean audio with basic equipment, avoid clipping, basic edit of audio, export in high quality format for the chosen area of focus (Music Based Radio, Live Sports, Podcasting, Live Sound, Studio Recording).

Workplace Skills

The following workplace skills should be discussed, taught, and re-enforced in the course:

- Communication
- Teamwork
- Critical and Creative Thinking
- Problem Solving
- Dependability

Skill Certificate 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 1	816	4	15	14	1	2	2					38	32