Western Technical College

10206124 Audio Productions

Course Outcome Summary

Course Information

Description	This course acquaints the student with the tools and techniques of audio production; sound pickup, microphone choice, amplification, recording, syncing sound with picture, editing, distribution, and output as they apply to live audio, overdubbing, and audio for audio-visual presentations. Students will also evaluate quality level of voice recordings, music, and ambience, while they are introduced to key frame editing and the exporting of media using a variety of codecs. The practice of utilizing selection criteria for potential purchase of audio components will be covered.
Career Cluster	Arts, A/V Technology and Communications
Instructional Level	Associate Degree Courses
Total Credits	3
Total Hours	72

Textbooks

No textbook required.

Success Abilities

1. Cultivate Passion: Enhance Personal Connections
2. Live Responsibly: Foster Accountability
3. Refine Professionalism: Improve Critical Thinking
4. Refine Professionalism: Participate Collaboratively

Program Outcomes

1. Apply the principles of design and storytelling to develop media products and services.
2. Demonstrate proficiency in the use of media software, tools, and technology.
3. Implement creative solutions from concept through completion.
4. Communicate creative rationale in formal and informal settings.

5. Implement project management skills to meet customer and market demands.
6. Apply effective and ethical business practices.

Course Competencies

1. Apply proper audio terms.

Assessment Strategies

1.1. Project

Criteria

You will know you are successful when

1.1. you apply audio terminology.
1.2. you use terms in correct context.
1.3. you incorporate audio terms into classroom discussion.

Learning Objectives

1.a. Define sample frequency.
1.b. Understand and apply various bit depths.
1.c. Define quantization.
1.d. Define various digital signal processors (DSPs).
1.e. Use proper audio connector names.
1.f. Identify various types of equalization (EQ) and their use.

2. Meet the requirements of a recording session.

Assessment Strategies

2.1. Performance

Criteria

You will know you are successful when

2.1. you adjust audio hardware and computer sound card settings properly.
2.2. you connect and adjust equipment for proper recording levels.
2.3. you properly place microphones and pop filters.
2.4. you operate a digital transport and adjust levels for optimal signal.
2.5. you add digital effects.
2.6. you adjust audio levels using automation.
2.7. you mixdown multiple channels into a final stereo track.

Learning Objectives

2.a. Act as engineer.
2.b. Connect and adjust equipment for proper recording levels.
2.c. Properly place microphones.
2.d. Operate a digital transport.
2.e. Mixdown multiple channels into a final stereo track.

3. Produce recordings under defined guidelines.

Assessment Strategies

3.1. Performance

Criteria

You will know you are successful when

3.1. you record multiple takes of dialog.
3.2. you edit sound clips into a smooth final track.
3.3. you equalize individual tracks to optimize master mix.
3.4. you create music using software for use in audio projects.
3.5. you record foley for use in digital storytelling.
3.6. you remove accidental noise or clicks.

Learning Objectives

3.a. Record multiple takes of dialog.
3.b. Edit sound clips into a smooth final track.
3.c. Equalize individual tracks to optimize master mix.
3.d. Create music using software for use in audio projects.
3.e. Record foley for use in digital storytelling.

4. Record or obtain appropriate voice, foley, sound effects and music for various mediums.

Assessment Strategies

4.1. Performance

Criteria

You will know you are successful when

4.1. you observe proper recording levels to make adjustments.
4.2. you use noise reduction to remove room tones and pops.
4.3. you apply compression to audio tracks.
4.4. you apply proper Digital Signal Processors (DSPs).
4.5. you use field recorders.

Learning Objectives

4.a. Observe proper recording levels.
4.b. Use noise reduction.
4.c. Apply compression to audio tracks.
4.d. Use various Digital Signal Processors (DSPs) such as equalizers, compressors, exciters, etc.
4.e. Properly use field recorders to obtain location sound.

5. Apply tasteful music accompaniments for various recorded dialog.

Assessment Strategies

5.1. Performance

Criteria

You will know you are successful when

5.1. you apply appropriate instrumentation.
5.2. you mix volumes to avoid clipping.
5.3. you edit sound loops to create fresh sounding pieces.
5.4. you apply basic music theory to compose music beds.
5.5. you use volume curves to duck music under narration.
5.6. you select or create music tracks that appropriately compliment the piece.

Learning Objectives

5.a. Search and choose appropriate instrumentation.
5.b. Mix volumes to avoid clipping.
5.c. Edit sound loops to create fresh sounding pieces.
5.d. Use basic music theory to compose music beds.
5.e. Use volume curves to duck music under narration.
5.f. Select/create music tracks that appropriately compliment the piece.

6. Create final ADR (Automated Dialog Replacement) recording project.

Assessment Strategies

6.1. Performance

Criteria

You will know you are successful when

6.1. you record dialog of at least two characters.
6.2. you create a concept/treatment for production planning.
6.3. you use a variety of methods to record sound effects.
6.4. you partner with others to create audio tracks.
6.5. you peer review work.
6.6. you improve mixing abilities, sound generation and voice acting based self-critique, student evaluation,

and instructor feedback.

Learning Objectives

6.a. Match audio performance and energy to visual action on screen.
6.b. Recreate foley using natural and synthetic means.
6.c. Edit sound, music and dialog to create a compelling piece.
6.d. Build on prior knowledge to further refine skills of production.

7. Create an audio story or graphic novel soundtrack.

Assessment Strategies

7.1. Project

Criteria

You will know you are successful when

7.1. you record dialog of at least four characters.
7.2. you use variety of methods to record sound effects.
7.3. you partner with others to create audio tracks.
7.4. you peer review work.
7.5. you improve mixing abilities, sound generation and voice acting based on self-critique, student evaluation, and instructor feedback.

Learning Objectives

7.a. Match audio performance and energy to visuals on screen.
7.b. Create and record a multitude of individual sounding characters.
7.c. Recreate foley using natural and synthetic means.
7.d. Edit sound, music and dialog to create a compelling piece.

8. Apply various recording sample rates and bit depths.

Assessment Strategies

8.1. Performance

Criteria

You will know you are successful when

8.1. you provide proper sample frequency and bit depth for compact disc.
8.2. you provide proper sample frequency and bit depth for video.
8.3. you consider the Nyquist sampling theorem when choosing recording frequencies.
8.4. you apply digital effects.

Learning Objectives

8.a. Provide proper sample frequency for compact disc.
8.b. Provide proper sample frequency for video.
8.c. Define the Nyquist sampling theorem.
8.d. Utilize digital effects.

9. Employ proper microphone choice and placement.

Assessment Strategies

9.1. Performance

Criteria

You will know you are successful when

9.1. you identify different types of microphone.
9.2. you address microphones based on construction type.
9.3. you select the microphone based on recording needs.
9.4. you place microphones at the proper distance from sound source.

Learning Objectives

9.a. Recognize and understand the proper way to address different microphones.
9.b. Place large diaphragm mic 8-12" from voice talent.
9.c. Direct talent to optimize audio performance.
9.d. Clip lav mic to talent's lapel.

9.e. Identify various microphone pickup patterns.
9.f. Choose shotgun mic for field recording.
9.g. Properly set-up and use field recorders
9.h. Use digital mic placement on a virtual guitar amp.

10. Obtain best possible mix using variety of audio monitoring systems.

Assessment Strategies

10.1. Project

Criteria

You will know you are successful when

10.1. you analyze balance of narration on both left and right channels.
10.2. you analyze balance between narration and music.
10.3. you analyze equalization of the low end vs. high end.
10.4. you evaluate the complete mix.

Learning Objectives

10.a. Monitor using headphones/earbuds and make notes of mix.
10.b. Monitor using near field monitors and make notes of mix.
10.c. Monitor using large monitors and make notes of mix.