

**AUDIO 220**  
**DIGITAL AUDIO V**

**COURSE LEARNING OUTCOMES**

1. Develop professionalism by meeting course expectations.
2. Develop time management skills and responsibility to meet project criteria and deadlines.
3. Describe the history and evolution of the sound for picture industry including land mark films.
4. List and define the five components of sound design.
5. Define time code types and frame rates.
6. Describe synchronization procedures of tape based and digital systems.
7. Demonstrate proficiency syncing digital audio workstations.
8. Set up and record an ADR session.
9. Set up and use Broadband Noise Removal software to clean up production audio.
10. Utilize software samplers and synthesizers to create sound effects.
11. Search for and import audio files from SFX libraries and spot to picture.
12. Describe the role of the music supervisor and the film scoring process.
13. List the different types of surround formats in use today.
14. Describe the rerecording process and film stem mixing techniques.
15. Define different delivery formats.
16. Use DAW software to mix a complete sound track for a video clip.

**COURSE OUTLINE**

- I. Introductions
  - A. Expectations/ Responsibilities
  - B. Professionalism
    1. Work Ethic/ Attitude
    2. Meeting Client Expectations/ Quality Control
  - C. Know Your Limitations
  - D. Overcoming Obstacles
  
- II. Overview of Sound for Picture Industry
  - A. History
    1. Edison
    2. Silent Films
    3. "Talkies"
    4. Radio Shows
  - B. Landmark Films
    1. Don Juan
    2. Fantasia
    3. King Kong
    4. Star Wars: THX
  - C. Evolution of Technology
    1. Mechanical era
    2. Electronic era
    3. Transistor era
    4. Digital era
  
- III. Overview: Five Components of Sound Design
  - A. Sound Effects

- B. Foley
  - C. Dialogue
  - D. Ambience
  - E. Music
- IV. Synchronization
- A. Positional Reference
    - 1. SMPTE
    - 2. Linear Time Code
    - 3. Vertical Interval Time Code
    - 4. MIDI Time Code
  - B. Clock Reference
    - 1. Black burst generator
    - 2. Word clock
  - C. Machine Control
    - 1. 9-pin serial
    - 2. MIDI Machine Control
  - D. Synchronizer Technology
    - 1. Tape based systems
    - 2. Digital Audio Workstation based systems
  - E. Time Code Pull-Up/ Pull Down scenarios
- V. Dialogue recording and editing
- A. Production sound recording
  - B. Automatic Dialogue Replacement
- VI. SFX Creation using Digital Audio Workstations
- A. Foley Recording/ Mixing
    - 1. Analogue Foley
    - 2. Simulated Foley
  - B. Sound Design
    - 1. Manipulating field recordings
    - 2. Samplers and synthesizer technology
- VII. Music Soundtrack Recording
- A. Music Supervisor
  - B. The Scoring Session
    - 1. Recording
    - 2. Mixing
- VIII. The Final Dub
- A. Surround Mixing
    - 1. Setting up a session for surround mixing
    - 2. Formats
    - 3. Stem mixing
    - 4. Rerecording Engineer
  - B. Monitoring Standards
  - C. Delivery formats and file types