

Mendocino High School Multimedia Arts Program

Multimedia Unit Outline

Unit 1: Introduction to the Media Lab

- Studio etiquette
- Studio operations
- Safety/Health briefing
- Maintenance and care of equipment

Unit 2: Understanding Signal Flow

- Before students get their hands on the various radio/audio technologies in the classroom, they will be introduced to the concept of audio signal flow. Students will be able to understand how audio signal flow travels in, through, or out of both analog and digital radio/audio devices. In addition, students will also learn how to setup and configure various recording stations - simple and complex - so they can be prepared for various productions. Lastly, students will understand the importance of maintaining a safe, clean, and organized studio.

Unit 3: Fundamentals of Broadcast Radio Production

- Lab rules of radio conduct
- FCC rules for noncommercial broadcasters
- Basic radio transmission theory
- Show preparation, scripting and presentation: live and pre-recorded
- Live remote broadcasts (Sportscasting)
- Web streaming radio and podcasting
- Production roles: personnel in practice
- Fundamentals of producing live and pre-recorded content

Unit 4: Fundamentals of Audio Engineering/Sound Theory

- Brief History of Technology: Analog to Digital formats
- Science of Sound
- Digital Sound Recording and Editing with ProTools and Audacity
- Basic MIDI creation and editing with digital audio workstations
- Digital music creation in Reason and Pro Tools
- Audio compression for the web/broadcast
- Production roles: Personnel in practice
- Live sound reinforcement

Unit 5: Fundamentals of Video Production

- Brief history of TV/film technology and formats
- Film lighting fundamentals
- Digital video recording with digital cameras
- Digital video recording with DSLR cameras
- Live television production: multi camera live to tape
- Video editing with iMovie and Final Cut Pro
- Role of sound in video
- Automatic Dialogue Replacement (ADR)
- Video for the web: streaming and downloadable formats
- Creating a “Web-Series”
- Using Social Media to promote your content
- Production management
- Writing for Television and Film

Unit 6: Venue/Event Operations/Theater Technologies

- Equipment Basics: Lighting and Sound Instruments
- Programming the lighting board
- Theater Light design: 3 point, gels, FX, and creating space
- Video projection on the big screen
- Theater production and management fundamentals