

FILM A261: TELEVISION STUDIO OPERATIONS

Item	Value
Curriculum Committee Approval Date	12/08/2021
Top Code	061220 - Film Production
Units	2 Total Units
Hours	72 Total Hours (Lecture Hours 18; Lab Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S)

Course Description

Participation in the production and technical support of special television programs for students interested in gaining further experience with television. PREREQUISITE: FILM A155. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Demonstrate the operation of an advanced television engineering room.
2. Demonstrate the operation and programming of a digital lighting system.
3. Demonstrate the ability to work cooperatively as part of a production/post-production team.

Course Objectives

- 1. Ability to identify the major components of a television engineering room.
- 2. Ability to operate digital routers.
- 3. Ability to operate digital video recorders and use proper terminology.
- 4. Ability to operate camera control units under a wide variety of studio lighting conditions.
- 5. Ability to identify videotape formats and select corresponding playback machines.
- 6. Ability to route playback machine to correct input on control room switcher.
- 7. Ability to use intercom system and proper terminology associated with TV engineering operations.
- 8. Ability to operate software based lighting systems.
- 9. Ability to describe and troubleshoot a DMX based lighting system.
- 10. Ability to distinguish between and store lighting values, cues and dimming commands.
- 11. Ability to operate a CCU using advanced controls for specialized television production needs.

Lecture Content

Overview of television engineering operations. Routing Video/audio signal control Lighting systems operation Introduction to engineering room layout. Manual router Studio signal controls Bars and tone generator Playback controls Engineering monitor Remote systems operation Concepts and operation of digital routers. Destination Source Digital video recording terminology and operation. Routing to a switcher input Format selection Cueing Basic camera control (CCU) operation. Camera power Camera Bars White balance Iris Master black Videotape playback/formats/terminology and routing. Intercom operation. Channel one production team Channel two lighting Terminology Operation of software based lighting systems. Theory and practice of DMX command structure. Setting and storing lighting values. Recording light cues. Default transition time Up cue Down cue Setting dimmers. Advanced CCU operation. Gain Detail Knee Shutter Skin detail

Lab Content

LABORATORY CONTENT (36 Hours) is ARRANGED (TBA) LAB CONTENT (36 Hours) The following content will be covered in a combination of scheduled and TBA lab hours: Performance of television engineering operations. Routing Video/audio signal control Lighting systems operation Performance in engineering room. Manual router Studio signal controls Bars and tone generator Playback controls Engineering monitor Remote systems operation Performance and operation of digital routers. Destination Source Use of digital video recording terminology and operation. Routing to a switcher input Format selection Cueing Basic camera control (CCU) operation. Camera power Camera Bars White balance Iris Master black Operation of video playback/formats/terminology and routing. Intercom operation. Channel one production team Channel two lighting Terminology Operation of software based lighting systems. Practice of DMX command structure. Setting and storing lighting values. Recording light cues. Default transition time Up cue Down cue Setting dimmers. Advanced CCU operation. Gain Detail Knee Shutter Skin detail

Method(s) of Instruction

- Lecture (02)
- Lab (04)

Instructional Techniques

Lecture Demonstration Lab hours Examinations

Reading Assignments

Students will read from instructor handouts and text book

Writing Assignments

Proficiency in the use of digital and software based systems unique to television engineering operations. Demonstrated by hands-on operation during television productions and by incorporating the correct use of terminology throughout the production process.

Out-of-class Assignments

Students will spend approximately 2 hours a week in production.

Demonstration of Critical Thinking

Hands-on examination of student television engineering room operations. Hands-on examination of student using software based lighting system. Skill level and participation during lab hours.

Required Writing, Problem Solving, Skills Demonstration

Proficiency in the use of digital and software based systems unique to television engineering operations. Demonstrated by hands-on operation during television productions and by incorporating the correct use of terminology throughout the production process.

Eligible Disciplines

Broadcasting technology (film making/video, media production, radio/TV): Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.
Film studies: Masters degree in film, drama/theater arts, or mass communication OR bachelors degree in any of the above AND masters degree in media studies, English, or communication OR the equivalent. Masters degree required.

Textbooks Resources

1. Required Jerry Whitaker (Author), Blair Benson (Author). Standard Handbook of Video and Television Engineering, ed. New York: McGraw-Hill, 2013

Other Resources

1. Selected readings and handouts from "industry" magazines/journals.
2. Video material (cassette/DVD) for recording television productions.