

COURSE TITLE: Video Principles for Multi-Media

COURSE NUMBER: COMM-121

CREDIT HOURS: Three

INSTRUCTOR: Billy Durham, Jr.

OFFICE LOCATION: Administration Bldg. Room 173

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OFFICE HOURS: Monday - Friday 1:30-4:30
Appointments as necessary
Phone: 251-7700, ext. 2108/office
Studio - ext. 2110

REQUIRED TEXT AND MATERIALS: Television Production Handbook, 8th edition, by Herbert Zettl

COURSE DESCRIPTION: Video Principles for Multi-Media is a basic course dealing with the disciplines and techniques of video production. The course will cover audio, lighting, cameras and lenses, the switcher, recording and editing, single-camera talent, directing, and other crew positions.

EXPECTED LEARNER OUTCOMES: Upon successful completion of this course, the student will be able to:

1. Describe disciplines and techniques as they apply to equipment and crew positions.
2. Describe the signal flow and technical control as it relates to a typical audio system.
3. Identify audio equipment and utilize creative production techniques.
4. Design a video production lighting system.
5. Identify various components of the camera structure and lens design.
6. Understand camera operations and production techniques.
7. Understand the Switcher and the disciplines of the Technical Director.

8. Understand the function and operation of the digital videotape recorder.
9. Demonstrate a working knowledge of non-linear digital editing equipment and techniques.
10. Understand pictorial elements such as sets and graphics.
11. Understand the position of the on-camera talent, the performer, and the actor as it relates to television.
12. Understand the various duties and responsibilities of the production crew.
13. Demonstrate a working knowledge of directing a studio production.
14. Understand directing techniques for various formats.
15. Understand the difference between field production and studio production.

**LEARNING TASKS
& ACTIVITIES:**

The class will meet during the scheduled class time for recitation and discussion of selected chapters from the text. The instructor will designate days that will be spent in the computer lab for instruction using interactive media.

**ASSESSMENT OF
OUTCOMES:**

100 - 90% - A
89 - 80% - B
79 - 70% - C
69 - 60% - D
59 - 0% - F

Incompletes given at the semester end will only be given if previously agreed upon by the student and instructor with a specific time designated for the completion of the incomplete work. Please note the college's policy on incompletes as stated in the college catalog.

Tests must be taken on the scheduled day. Only if arrangements are made with the instructor prior to the original test date will a student be allowed to take a test late, and then it must be taken before the second class period following the test.

A student's final grade will be based on the following:

1. Four unit tests worth 100 points each.
2. Fifteen workbook assignments worth 20 points each.
3. Regular attendance and participation in class 200 points. (minus 10 points for each unexcused absence)
4. Final test 100 points. (100 points written)
5. Students may assist in College Television location shoots for extra credit. Subject to approval by instructor.

**ATTENDANCE
POLICY:**

Students are expected to attend all classes. It is the responsibility of the student to make definite arrangements with the instructor for make-up work before going on field trips or other college-sponsored events. Note that 200 points of the final grade is determined by regular attendance and participation in class. Absences may be excused if approved by instructor.

COURSE OUTLINE
SCHEDULE

WEEK	CHAPTER
1	1 – TV system, process 2 – Analog and digital TV
2	3 – TV camera
3	4 - Lenses
4	5 – Camera mounts 6 – Camera operation
5	7 – Lighting equipment
6	8 – Lighting techniques
7	9 – Audio: Sound pickup
8	10 – Audio: sound control
9	11 - Switching 12 – Video recording
10	13 - Editing
11	14 – Visual effects 15 - Design
12	16 – Production people 17 – Producing
13	18 - Director/production
14	19 – Director/production
15	20 – Field production/big remotes
	Final Exam

THIS SYLLABUS IS SUBJECT TO REVISION WITH PRIOR NOTICE TO THE STUDENT BY THE INSTRUCTOR.

VIDEO PRINCIPLES FOR MULTI-MEDIA

Describe disciplines and techniques as they apply to equipment and crew positions.

1. Identify the difference between the attitude and self image as it applies to the development of a professional attitude. (Knowledge)
2. Explain the difference between broadcast categories and the relationship to station size. (Synthesis)
3. Describe the difference between multi-camera and single-camera production techniques. (Knowledge)
4. Identify the location for the basic working equipment in a production facility. (Knowledge)
5. Define the duties of the director and the producer. (Knowledge)
6. Describe the difference between the above-the-line costs and the below-the-line costs in an average production. (Knowledge)

Describe the signal flow and technical control as it relates to a typical audio system.

1. Identify the difference between technical control and a creative function in an audio system. (Knowledge)
2. List the seven basic control functions and give examples of each. (Knowledge)
3. Name at least five examples of audio sources. (Knowledge)
4. Explain the different types of audiotape track configurations. (Evaluation)
5. Illustrate a basic audio signal flow pattern in a typical studio. (Analysis)

Identify audio equipment and utilize creative production techniques for analog and digital audio.

1. Explain the meaning of the term "Hertz" as it relates to audio frequency. (Evaluation)
2. Give the meaning of the term "proximity effect". (Comprehension)
3. List the three microphone pickup patterns. (Knowledge)
4. List the three microphone usage categories and give examples of each. (Knowledge)
5. Define the inverse square law as it applies to audio. (Knowledge)
6. Explain why the "cueing procedure" is necessary. (Evaluation)

Design a television lighting system.

1. Describe the two types of measurable light as it relates to television. (Knowledge)
2. Define contrast ratio as it relates to television lighting. (Knowledge)
3. Explain the importance of the color temperature of light. (Evaluation)
4. List the four lighting objectives when dealing with creative purposes. (Knowledge)
5. List two types of lighting instruments. (Knowledge)
6. Explain the fundamentals of a three point lighting concept. (Evaluation)
7. Explain the inverse square law as it applies to television lighting. (Evaluation)
8. Design a sample studio lighting plot. (Synthesis)

Understand the camera structure and lens design.

1. Describe the television camera as it relates to the video control functions. (Knowledge)
2. Explain the concept of additive color. (Evaluation)
3. Define the uses of a vectorscope and a waveform monitor. (Knowledge)
4. List the three attributes of video color. (Knowledge)
5. Identify three types of camera pickup tubes. (Knowledge)
6. Explain the scanning process from the television camera to the picture tube. (Comprehension)

7. Define focal length as it applies to the television camera lens. (Knowledge)
8. Explain the "law of the lenses". (Comprehension)
9. Define "depth of field". (Knowledge)
10. Explain the advantages of a zoom lens compared to a fixed focal length lens. (Evaluation)
11. Explain the uses for a "macro lens". (Evaluation)

Understand camera operations and production techniques.

1. Define "camera mount". (Knowledge)
2. List the three basic parts of the camera. (Knowledge)
3. Explain the two types of camera head movement. (Comprehension)
4. List three types of camera mounts and give examples of each. (Knowledge)
5. List the three different camera perspectives. (Knowledge)
6. Give some examples of basic television shots involving the field of view. (Comprehension)
7. List the eight standard rules that every camera operator should follow. (Knowledge)
8. Explain why a camera "shot sheet" is necessary. (Comprehension)

Understand the Switcher and the disciplines of the Technical Director.

1. Describe what type of video effects are generated with the Digital Video Effects generator. (Knowledge)
2. Explain the use of the "fader lever" on the video switcher. (Evaluation)
3. List three types of switcher transitions. (Knowledge)
4. Describe the significance of a television monitor in conjunction with the switcher. (Knowledge)
5. Describe a common use of the chroma key in a television studio. (Knowledge)
6. Give an example of a command of preparation and a command of execution. (Comprehension)

Understand the function and operation of the digital videotape recorder.

1. Define "postproduction editing". (Knowledge)
2. Describe the importance of a CCD in a television camera. (Knowledge)
3. Explain when and where the first videotape machine was used in a broadcast application. (Evaluation)
4. Name the six videotape formats in use today. (Knowledge)
5. Explain the purpose of a "helical scan" design of a videotape machine. (Comprehension)
6. Explain how a "freeze-frame" is made possible. (Comprehension)
7. Explain what a "control track" does. (Comprehension)
8. Explain the use for SMPTE Time Code. (Comprehension)
9. Identify the commonly used audio and video plugs and connectors. (Knowledge)
9. State the purpose of the "automatic gain control" on a VTR. (Knowledge)

Demonstrate a working knowledge of non-linear digital editing equipment and techniques.

1. Define real-time editing. (Knowledge)
2. Describe the three methods of editing. (Knowledge)
3. State the three essential pieces of equipment in an editing system. (Knowledge)
4. Explain the difference between assemble editing and insert editing. (Synthesis)
5. Describe the purpose of head pad and tail pad in the editing process.
6. Define a "jump cut". (Knowledge)
7. Explain the concept of "seamless editing". (Evaluation)
8. State the purpose for a log sheet. (Knowledge)

Understand pictorial elements such as sets and graphics.

1. Name the three staging styles and give examples of each. (Knowledge)
2. Describe the basic scenic unit for television. (Knowledge)
3. Define the "three to four aspect ratio" as it relates to television graphics. (Knowledge)
4. Explain the difference between essential area and scanning area. (Evaluation)
5. List three different pieces of hardware in a computer based graphics system. (Knowledge)
6. Explain the difference between methodical and optical spacing of letters in television graphics design. (Comprehension)

Understand the position of the on camera talent, the performer and the actor as it relates to television.

1. Give examples of fully scripted materials. (Comprehension)
2. List the seven basic points to be aware of in preparing for a studio interview. (Knowledge)
3. Compare television acting to theatrical acting. (Evaluation)
4. List the three applications of television makeup. (Knowledge)

Understand the various duties and responsibilities of the production crew.

1. List the duties of the associate director before the studio rehearsal. (Knowledge)
2. List the duties of the associate director during the rehearsal period. (Knowledge)
3. List the duties of the associate director during the program. (Knowledge)
4. Design a sample segment timing sheet. (Synthesis)
5. Describe the duties of the stage manager/floor director. (Knowledge)
6. Describe the duties of the unit manager. (Knowledge)
7. Describe the duties of the following crew positions: lighting director, audio operator, camera operator, technical director, recording engineer, grips and floor assistants, graphic designer, and production assistant. (Knowledge)

Have a working knowledge of directing a studio production.

1. Explain the principles of picture continuity as it relates to wide shots and close up shots. (Comprehension)
2. Define a position jump. (Knowledge)
3. Explain the importance of the axis of action/conversation. (Comprehension)
4. List and explain the five types of camera transitions. (Knowledge)
5. Name the three different script forms that the director may have to work with. (Knowledge)

Understand directing techniques for various formats.

1. Name the five different areas to consider in pre-production planning. (Knowledge)
2. List and explain the three main functions of the director. (Knowledge)
3. Design a sample storyboard. (Synthesis)

Understand the impact of interactive media on the communication spectrum.

1. Explain the role of interactivity and dynamic content in interactive media presentations. (Comprehension)
2. Explain the elements that make up interactive media presentations. (Comprehension)
3. Design a sample interactive media page. (Synthesis)
4. Identify examples of software and hardware used in interactive media production. (Comprehension)