

Digital Video Technology

COURSE OUTLINE

1. Course Title: Digital Video Technology

2. CBEDS Title: Broadcasting Technology

3. CBEDS Number: 5770

4. Job Titles:

Video Photographer	Assistant Producer
Instructional Video Designer	Director
Instructional Video Trainer	Assistant Director
Production Technician	Lighting Technician
Editing Technician	Production Manager
Sound Technician	Storyboard Artist
Special Effects Technician	Video Engineer
Production Artist	Editing Engineer
Producer	Production Designer

5. Course Description:

This competency-based course provides students an introduction to creating digital video projects, using digital camcorders and non-linear editing software. This project-based course emphasizes confidence and competence building strategies to train students on these digital video tools as well as video techniques, pre production planning, scripting and story organization. In addition to class hours, additional hours and homework will be required outside of class time. The course operates in a working environment that is flexible; creative; self paced; and provides off-campus privileges for students to complete video projects.

6. Objectives:

Students will:

1. Demonstrate proper use of the following Digital Video equipment and the terminology associated with each;
 - a. Cameras and Accessories
 - b. Sound recording and editing equipment and accessories
 - c. Lighting equipment and accessories
 - d. Industry Standard Video editing software
 - e. Video exporting using current video media format
2. Create and use preproduction documents such as storyboards, shooting scripts, proposals, instructional design scripts, shot lists, editing scripts, text lists, lighting design documents, wardrobe lists and location diagrams.
3. Demonstrate proper use of industry terminology in all production materials, activities and critiques.
4. Write, direct, produce and broadcast a quality digital video product
5. Demonstrate industry level ability and familiarity in Digital Video Technology by critiquing digital videos in a variety of genres (Commercial, documentary, Short Films and Instructional videos)

Pathway

Recommended Sequence	Courses
Introductory	Computer Foundations
Skill Building	Digital Video Technology
Advanced Skill	Advanced Digital Video Technology

6. **Hours:** *Students receive up to 180 hours of classroom instruction.*

7. **Prerequisites:** None

8. **Date (of creation/revision):** July 2010

9. Course Outline

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Upon successful completion of this course, students will be able to demonstrate the following skills necessary for entry-level employment.				
Instructional Units and Competencies	Course Hours	Model Curr. Standards	CA Academic Content Standards	CAHSEE
<p>I. CAREER PREPARATION STANDARDS</p> <p>A. Career Planning and Management</p> <ol style="list-style-type: none"> 1. Know the personal qualifications, interests, aptitudes, knowledge, and skills necessary to succeed in careers. <ol style="list-style-type: none"> a. Students will identify skills needed for job success. b. Students will identify the education and experience required for moving along a career ladder. 2. Understand the scope of career opportunities and know the requirements for education, training, and licensure. <ol style="list-style-type: none"> a. Students will describe how to find a job. b. Students will select two jobs in the field and map out a timeline for completing education, certification or licensing requirements. c. Students will describe career opportunities in the industry sector. 3. Develop a career plan that is designed to reflect career interests, pathways and postsecondary options. <ol style="list-style-type: none"> a. Students will conduct a self-assessment and explain how professional qualifications affect career choices. 4. Understand the role and function of professional organizations, industry associations, and organized labor in a productive society. <ol style="list-style-type: none"> a. Contact two professional organizations and identify the steps to become a member. 5. Understand the past, present and future trends that affect careers, such as technological developments and societal trends, and the resulting need for lifelong learning. <ol style="list-style-type: none"> a. Students will describe careers in business. b. Students will identify work-related cultural differences to prepare for a global marketplace. c. Students will relate the importance of the business management to the California economy. 6. Know the main strategies for self-promotion in the hiring process, such as completing job applications, resume writing, interviewing skills, and preparing a portfolio. <ol style="list-style-type: none"> a. Students will write and key a resume, cover and thank you letters, and complete a job application. <p>B. Technology</p> <ol style="list-style-type: none"> 1. Understand past, present and future technological advances as they related to a chosen pathway. 2. Understand the use of technological resources to gain access to, manipulate, and produce information, products and services. <ol style="list-style-type: none"> a. Students will demonstrate the ability to complete simple tasks on the computer, including word processing, wiring and order and inventory control. 3. Understand the influence of current and emerging technology on selected segments of the economy. 4. Use appropriate technology in the chosen career pathway. 	<p>20</p> <p>Additional hours are integrated throughout the course.</p>	<p>Arts, Media & Entertainment Industry Sector</p> <p>Foundation Standards:</p> <p>Reading 2.0 (2.6)</p> <p>Writing 2.2 (2.5, 2.6)</p> <p>Career Planning & Mgmt. 3.1, 3.2, 3.3, 3.4, 3.5,3.6, 3.7</p> <p>Technology</p> <p>4.1, 4.2 4.3, 4.4, 4.5, 4.6</p>	<p><u>Language Arts</u> (8)</p> <p>R 1.3, 2.6</p> <p>W1.3, 2.5,</p> <p>LC 1.4,1.5 1.6</p> <p>LS1.2, 1.3, (9/10)</p> <p>R2.1,2.3,2 W2.5</p> <p>LC1.4</p> <p>LS 1.1, 2.3 (11/12)</p> <p>R2.3</p> <p>W2.5</p> <p>LC1.2</p> <p><u>Math</u> (7) NS1.2, 1.7</p> <p>MR 1.1,1.3 2.7,2.8, 3.1</p>	<p>Lang. Arts R 8.2.1 (9/10) R 2.1, 2.3 W2.5 Math (7) NS 1.2, 1.3, 1.7 MR 1.1, 2.1, 3.1</p>

<p>C. Problem Solving and Critical Thinking</p> <ol style="list-style-type: none"> 1. Apply appropriate problem-solving strategies and critical thinking to work-related issues and tasks. 2. Use critical thinking skills to make informed decisions and solve problems. <p>D. Health and Safety</p> <ol style="list-style-type: none"> 1. Know policies, procedures, and regulations, regarding health and safety in the workplace, including employers’ 2. Use tools and machines safely and appropriately. 3. Know how to both prevent and respond to accidents in the industry. <p>E. Responsibility and Flexibility</p> <ol style="list-style-type: none"> 1. Understand the qualities and behaviors that constitute a positive and professional work demeanor. 2. Understand the importance of accountability and responsibility in fulfilling personal, community, and work place roles. 3. Understand the need to adapt to varied roles and responsibilities. <p>F. Ethics and Legal Responsibilities</p> <ol style="list-style-type: none"> 1. Know the major local, district, state and federal regulatory agencies and entities that affect the industry and how they enforce laws and regulations. 2. Understand the concept and application of ethical and legal behavior consistent with workplace standards. <ol style="list-style-type: none"> a. Contact a business and obtain a copy of their rules for employment. b. Role play difference ethical scenarios. 3. Understand the role of personal integrity and ethical behavior in the workplace. <p>G. Leadership and Teamwork</p> <ol style="list-style-type: none"> 1. Understand the ways in which preprofessional associations such as the Int’l Media Communications Assn. and competitive career development activities enhance academic skills, promote career choices, and contribute to employability. 2. Understand leadership, cooperation, collaboration, and effective decision-making skills applied in group or team activities, including the student organization. <p>H. Technical Knowledge and Skills</p> <ol style="list-style-type: none"> 1. Understand the aims, purposes, history, and structure of various professional graphic organizations, and know the opportunities they makes available. 				
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Instructional Units and Competencies	Hours	Model Curr. Standards.	CA Academic Standards	CAHSEE
I. Orientation and Safety A. Introduction to Video Structure i. Interview Techniques 1. Personal Stories ii. Preproduction Planning (Requirements) 1. Journal 2. Storyboard 3. Proposal B. Introduction to Video Technology C. Care and Maintenance of Equipment D. Electrical Equipment and Wiring E. Health & Safety	5	Arts, Media & Entertain. Industry Sector Performing Arts Pathway A1.0 (1.0) A1.2 (2.2) A1.2 (2.3) Information Technology Industry Sector Media Support & Services Pathway	ELA 1.5, 2.2, 2.3, 5.1	
II. Video Camera Skill Set A. Vocabulary B. Parts and Function Camera Set up C. Basic Camera Technique and Framing	5	Pathway B3.1 B3.2 B3.3 B4.1		
III. Specific Video Camera Equipment A. Vocabulary B. Video Camera Controls C. Video Camera Operation D. Power Sources for Camera E. Video Tape and Video Tape Recorders F. Video Tape Formats G. Production Techniques H. Sound/Audio Techniques I. Troubleshooting	10			
IV. Video Camera Techniques A. Vocabulary B. Depth of Field C. Focusing D. Camera Movement E. Camera Angles F. Transitions	15			
V. Video Camera Composition A. Vocabulary B. Techniques for Composition	2			
VI. Video Camera Lighting A. Vocabulary B. Outdoor Lighting C. Reflections D. Three Point Lighting Technique	2			

Instructional Units and Competencies	Hours	Model Cur. Standards.	CA Academic Standards
VII. Audio A. Vocabulary B. Types of Sound Situations C. Microphones and Connectors D. Outdoor and Indoor Microphone Techniques E. Troubleshooting Audio	4	Arts, Media & Entertain. Industry Sector Performing Arts Pathway A2.2 A2.6 A2.7	S. 9-12; Physics; 4a, & d ELA 9-10; W; 1.1, 1.2, 1.9 WA; 2.1, 2.3, 2.4, 2.6 M. 7; 1.1, 1.3
VIII. Other Image Acquisition Technology A. Vocabulary B. Scanners C. CD ROM D. DVD ROM E. Internet	2	Information Technology Industry Sector Media Support & Services Pathway B1.6 B2.1 B4.1	
IX. Preproduction Techniques A. Vocabulary B. Production Personnel and Roles C. Production Planning i. Proposal D. Storyboards E. AV Edit Plan F. Field Production	30		
X. Production Techniques A. Vocabulary B. Camera Placement C. Hand Held, Tripod	20		
XI. Editing: Non Linear Post Production A. Vocabulary B. Use of Non Linear Editing Systems C. Types of Editing i. Simple Non Linear ii. Complex Non Linear D. Audio Edit i. Mixing 2-Channel Audio ii. Using Audio Insert Tracks iii. Using Various Audio Sources: CD, MP3, Live, Computer Generated. E. Creating and Mixing Voice Over /Narration tracks. i. Setting correct Mixing Levels	60		
XII. Transitions: Technique & Type A. Vocabulary B. Text Transitions C. Video Transitions	5		

Instructional Units and Competencies	Hours	Model Cuur. Standards.	CA Academic Standards	CAHSEE
XIII. Video Context and Professional Production Techniques A. Vocabulary B. Video & Production Techniques in Feature & Independent Films C. Directors Report (Critiquing production) D. Craftsperson Reports (Critiquing Technique) E. Guest Speakers	5	Arts, Media & Entertain. Industry Sector Performing Arts Pathway A1.5 (5.1)	ELA 9-10; R; 2.1 SS 10; WH; 10.11	
XIV. Video Communication Issues A. Vocabulary B. Ethics & Morality C. Video Communication in Our Culture D. Product Placement E. Commercials F. PSA's G. Guest Speakers H. Copy Write Issues I. Fair Use Doctrine	5			

10. Additional recommended/optional items

- a. Articulation: Formalized articulation agreements should be mentioned.
- b. Academic credit: None
- c. Instructional strategies:
 - Methods of Instruction:
 - a. Lecture
 - b. Audio Visual Materials
 - c. Research Readings and Written Presentations
 - d. Homework Assignments
 - e. Group & Individual Projects
 - f. Discussion & Group Dynamics
 - g. Quizzes, Tests, Performance Evaluations & Final Exam
 - h. Guest Speakers
 - i. Internet Exploration
- d. Instructional materials: Teacher & Industry generated
- e. Certificates: None