The course enables students to develop a broad perspective of design communication theory, processes and tools, applications, and career opportunities in digital media. Students will apply design elements and principles to projects ranging from print media publications, digital video and audio presentations, and website design.

JUSTIFICATION FOR COURSE:

CATALOG DESCRIPTION:

PREREQUISITES:

COREQUISITES:

ADVISORIES:

ASSIGNED DISCIPLINES:

Commercial music
Graphic arts (desktop publishing)
Mass communication
Multimedia

MATERIAL FEE: Yes [ ] No [X] Amount: $7.00

CREDIT STATUS: Noncredit [ ] Credit - Degree Applicable [X] Credit - Not Degree Applicable [ ]

GRADING POLICY: Pass/No Pass [X] Standard Letter [X] Not Graded [ ] Satisfactory Progress [ ]

OPEN ENTRY/OPEN EXIT: Yes [ ] No [X]

TRANSFER STATUS: CSU Transferable[ ] UC/CSU Transferable[X] Not Transferable[ ]

LEVELS BELOW TRANSFER: Not Applicable

CALIFORNIA CLASSIFICATION CODES: Y - Not Applicable

NON CREDIT COURSE CATEGORY: Y - Not applicable, Credit Course

OCCUPATIONAL (SAM) CODE: D

REPEATABLE ACCORDING TO STATE GUIDELINES: No [X] Yes [ ] NUMBER REPEATS:

REQUIRED FOR DEGREE OR CERTIFICATE: No [ ] Yes [X]
Digital Media(Associate in Arts)

GE AND TRANSFER REQUIREMENTS MET:

CSU Transfer Course
A. Transfers to CSU

PROGRAM LEVEL LEARNING OUTCOME(S) Supported by this course:

Edit audio, video and graphic content in a digital environment.
COURSE LEVEL STUDENT LEARNING OUTCOME(S) Supported by this course:

1. Demonstrate the ability to correctly identify appropriate tools and processes to create various forms of multimedia communication pieces.
2. Acquire design concepts that can be applied to all forms of digital media arts.
3. Demonstrate technical skills necessary for an occupation in the multimedia field.

COURSE OBJECTIVES:
1. Develop an understanding of the importance and impact of communication systems and communication design.
2. Compare and contrast contemporary design standards and media with communication and design strategies of the past.
3. Design and produce multimedia projects for a variety of objectives and audiences.
4. Apply elements of design to a variety of digital media arts projects.
5. Develop written criteria to support design and creative choices.
6. Demonstrate skills in typography through use of appropriate fonts for titles, subtitles, tag lines and body text in print and non print projects.
7. Demonstrate proficiency in digital media production skills through the use of appropriate equipment and software applications.
8. Analyze and evaluate web sites to apply successful design elements in the creation web pages.

COURSE CONTENT:

LECTURE CONTENT:

A. Producing: Exploiting New Opportunities and Markets in Digital Media
   1. The Audience
      a. Audience Analysis
   2. Technology of Distribution
   3. New Production Considerations
   4. The Big Ten of Distribution
      a. AM & FM Terrestrial Radio
      b. HD-Radio
      c. Mobile
      d. Satellite
      e. Terrestrial Television
      f. Cable/Telcos
      g. Disk/Disc
      h. The Internet
      i. Games
      j. Motion Pictures
   5. Solid State Storage
      a. Hard Drives
      b. SD Cards
      c. Thumb Drives
      d. Optical Disc
      e. Disk Based Storage
   6. Economics of Distribution
      a. Broadcast, Cable and Satellite
      b. Theatrical and Non Theatrical
      c. Home Vide, Audio and Multimedia
      d. Corporate and In-House
B. The Production Process Analog and Digital Technologies

1. Stages of Production
   a. Pre Production
   b. Production
   c. Post Production

2. Digital vs Analog Technology
   a. Digital Technologies Used in Preproduction
   b. Digital Technologies used in Production
   c. Digital Technologies Used in Postproduction

3. Production Terminology

4. Single Camera vs. Multiple-Camera

5. Studio vs Location Production

6. Planning for Positive Production Experiences

7. Avoiding Negative Production Experiences

8. Production Team - Digital Media
   a. Creative Staff
      i. Producer
      ii. The Director
      iii. The Assistant/Associate Director
      iv. The Screenwriter
   b. Production Team
      i. Director of Photography
      ii. Lighting Director
      iii. Camera Operator
      iv. Art Director or Scenic Designer
      v. Technical Director
      vi. Editor
      vii. Audio Engineer or Mixer
      viii. Video Engineer
   c. Production Team In The Recording Industry
      i. Producer and Operator
      ii. Arranger
   d. The Production Team in Interactive Digital Media Production
      i. The Developer
      ii. The Publisher
      iii. The Producer
      iv. The Designer
      v. The Writer
      vi. The Video Director
      vii. The Art Director
      viii. The Graphic Artist/Animator
      ix. The Programmer
   e. Visualization: Images, Sounds, and the Creative Process
      i. Conveying Information
      ii. Rhetorical Persuasion
      iii. Artistic Expression
   f. Production Aesthetics
      i. Realism
      ii. Modernism
      iii. Postmodernism
iv. Combining Aesthetic Approaches
C. Producing and Production Management
   1. Producing
      a. The Role of the Producer
      b. Production Strategies
      c. Market Research
      d. Production Goals and Objectives
      e. Audience Analysis
      f. Proposal Writing
      g. Project presentation
      h. Legal Rights and Concerns
         i. Unions, Guilds, and Non Union Working Conditions.
   2. Production Management
      a. Script Breakdown
      b. Shooting Schedule
      c. Production Budget
D. Scriptwriting
   1. Visual Thinking
   2. Preparation for Scriptwriting
      a. Research
      b. Premise, Synopsis and Outlines
      c. Treatments
   3. Scriptwriting Formats
      a. Full-Page Master Scene Script Format
      b. Split-Page Script Format
      c. Semi-Scripted Formats
   4. Fiction Scriptwriting
      a. Dramatic Structure
         i. Act One
         ii. Act Two
         iii. Act Three
         iv. Rising Action: Crisis and Climax
         v. Falling Action: Resolution
         vi. Text and Subtext
      b. Narrative Structure
      c. Characterization and Theme
      d. Adaptation
      e. Short Fiction Forms and Formats
      f. Interactive Stories and Games
   5. Nonfiction Scriptwriting
      a. Rhetorical and Expository Structure
      b. Voice and Point of View
      c. Narrative and Interviews
      d. Short Nonfiction Forms and Formats
         i. News Stories
         ii. Talk Shows
         iii. Commercial and Public Service Announcements
         iv. Instructional Films and Videos
      e. Interactive Learning and Training
E. Directing: Aesthetic Principles and Production Coordination
   1. Aesthetic Approaches
      a. Realism
      b. Modernism
      c. Postmodernism
2. Visualization
   a. Types of Shots
      i. Long Shot
      ii. Medium Shot
      iii. Close Shot
      iv. Overhead Shot
   b. Stationary vs Mobile Camera Shots
      i. Pan Shot
      ii. Tilt Shot
      iii. Pedestal Shot
      iv. Zoom Shoot
      v. Dollyshot
      vi. Tracking Shot
      vii. Trucking Shot
      viii. Crane or Boom Shot

3. Composition
   a. Aspect Ratio
   b. Essential Area
   c. Rule of Thirds
   d. Symmetry
   e. Closure
      i. Depth and Perspective
      ii. Frame Movement
      iii. Image Qualities
      iv. Scale and Shape
      v. Speed of Motion

4. Combining Shots
   a. Straight Cut or Take
   b. Fade
   c. Dissolve
   d. Wipe
   e. Defocus
   f. Swish Pan
   g. Special Effects
      i. Split Screen of Shared Screen
      ii. Superimpositions
      iii. Keying and Chroma Key
      iv. Matte and Blue Screen
         a. Negative Image
         b. Freeze Frame
      v. Digital Transitions
      vi. Scene Construction

5. Continuity Editing
   i. Pace and Rhythm
   ii. Compression and Expansion of Time
   iii. Screen Directionality
   iv. Directional Glances
      v. The 180 degree Axis of Action Rule

6. Sound and Image Interaction
   a. On Screen vs Off Screen Sound
   b. Commentative vs Actual Sound
   c. Synchronous vs Asynchronous Sound
   d. Parallel vs Contrapuntal Sound
   e. Composing Images for Prerecorded Music
   f. Preparing the Shooting Script
g. Production Coordination
   i. Production Meetings
   ii. Casting
   iii. Rehersals
   iv. Performer and Camera Blocking
7. Multiple-Camera Directing
   a. Timing
   b. Running Time
   c. Timing in Production
   d. On-the Air Timing
   e. Production Switching
   f. Director's Commands
   g. Live on Tape Recording
   h. Single Camera Directing
      i. Cutaways
      ii. Shooting ratio
      iii. Director's Terminology

F. Audio/Sound
   1. Aesthetics of Audio/Sound
   2. Types of Microphones
      a. Transducer Elements
      b. Pickup Patterns
      c. Impedance
      d. Hidden Mics
      e. Wireless (RF) Mics
      f. Stero Mic Placement
      g. Digital Mic Placement
   3. Sound-Signal Control
      a. Audio Problems: Distortion and Noise
      b. Sound Intensity Measurement
      c. Cable and Connectors
      d. Mixing
      e. Console Operation
      f. Recording and Mixing Commands
   4. Sound Perspective
      a. Stereo Sound
      b. Surround Sound
      c. Dolby Digital 5.1 Sound

G. Lighting
   1. Lighting Aesthetics
      a. Realist Lighting
      b. Modernist Lighting
      c. Post Modernist Lighting
   2. Light and Color
      a. Sunlight
      b. Tungsten Light
      c. Carbon Arc Light
      d. Metal Halide Light
      e. Florescent Light
      f. White Balance
   3. Lighting Instruments
      a. Spotlights
      b. Floodlights
      c. Portable Lights
d. Mounting Devices

4. Lighting Control
   a. Lighting Control in the Studio
   b. Lighting Control on Location

5. Light measurement
   a. Types of Light Meter Readings
   b. Determining Contrast Ratios
      i. Lighting Ratios
         a. Key To Fill Ratio
         b. Key to Back ratio
      ii. Contrast Ratios
         iii. Adjusting Contrast

6. Setting Lighting Instruments
   a. Three and Four - Point Lighting
      i. Key Light
      ii. Fill Light
      iii. Separation Light
   b. Background Light
   c. Controlling Shadows
   d. Cross Key Lighting
   e. Lighting Moving Subjects
   f. Low-Key vs. High-Key Lighting
   g. Lighting Plots
   h. Single-Camera vs. Multiple-Camera Situations
      i. Lighting for Digital Cameras

H. Camera
   1. Camera Placement
   2. Framing
   3. Positioning
   4. Movement
   5. Mounting Devices
      a. Body Mount
      b. tripods
      c. Dollies
   6. Lens Control
      a. Basic Optics
      b. Aberrations
      c. Lens Perspective
         i. Focal Length and Angle of Acceptance
         ii. Variable Focal-Length Lens
         iii. Field of View
         iv. Image Depth
         v. Focus Distance
         vi. Lens Aperture
         vii. Depth of Field
   7. Video Cameras
      a. Basic Video Camera
      b. The Camera Chain
      c. Video Camera Filters
      d. Types of Video Cameras
   8. Digital Cameras
      a. Viewfinder
   9. Body
   10. Optics
11. Recording
12. Types of Digital Cameras
   a. Studio Digital cameras
   b. Electronic Cinema Cameras
   c. Field Digital Cameras
   d. Handheld Digital cameras
   e. Box/Pencil Digital Cameras
13. Film Cameras
   a. Types of Film cameras
      i. 8mm Cameras
      ii. 16mm Cameras
      iii. 35mm Cameras
      iv. Camera Accessories
14. Camera Care

I. Recording
   1. Digital Audio
      a. Digital Recorders
      b. The Power of Sound
      c. Making Digital Audio Files
      d. MIDI Audio
      e. MIDI vs Digital Audio
      f. Audio File Formats
      g. Adding Sound to Your Digital Media Project
         i. Space Considerations
         ii. Audio Recording
         iii. Keeping Track of Your Sounds
         iv. Audio CD's
         v. Sound for Your Mobile
         vi. Sound For the Internet
         vii. Copyright Issues
   2. Digital Video
      a. Signal Compression
      b. Component vs Composite recording Systems
      c. Digital Videotape Formats
      d. Tapeless Video Recording
      e. How Video Works and Is Displayed
         i. Analog Video
         ii. Digital Video
         iii. Displays
      f. Digital Video Containers
         i. Codecs
         ii. Video Format Converters
      g. Obtaining Video Clips

J. Design and Graphics
   1. Aesthetic Approaches
      a. Realist Design
      b. Modernist Design
      c. Postmodernist Design
   2. Principles of Design
      a. Design Elements
         i. Line
         ii. Shape
         iii. Texture
iv. Movement

b. Color
   i. Color Harmony
   ii. Color Contrast
   iii. Emotional Response to Color
   iv. Cultural Response to Color

c. Composition
   i. Balance
   ii. Perspective
   iii. Proximity
   iv. Similarity
   v. Figure/Ground
   vi. Equilibrium
   vii. Closure
   viii. Emphasis
   ix. X-Y-Z Axis
   x. Readability
   xi. Image Area
   xii. Scanning or Full Aperture Area
   xiii. Essential Area

3. Graphic Functions

4. Graphic Design
   a. Principles of Graphic Design
   b. Types of Graphics
      i. Off-Set Graphics
      ii. Computer Graphics
   c. Graphic Applications
      i. Photoshop
      ii. Illustrator
      iii. In-Design
      iv. After Effects
   d. Type/Font Measurement
      i. Typography
      ii. Cases
      iii. Serif vs Sans Serif
   e. Using Text in Digital Media
      i. Designing with Text
      ii. Fields for reading
      iii. HTML Documents
   f. Computers and Text
      i. The Font Wars are Over
      ii. Character Sets and Alphabets
      iii. Mapping Text Across Platforms
      iv. Languages in the World of Computers
   g. Font Editing and Design Tools
      i. Illustrator
      ii. Making Pretty Text
   h. Searching the Internet
      i. Hypertext Markup Language (HTML)
      ii. Interactivity
      iii. Multimedia
      iv. On-Set Graphics
   i. Lettering and Titles
   j. Illustrations
   k. Photographic Illustrations
5. Scenic Design
6. Set design
7. Set Construction
8. Properties
9. Costume Design
10. Makeup

K. Visual Editing
   1. Aesthetic Approaches
      a. Realism
      b. Modernism
      c. Postmodernism
   2. Editing Modes
      a. Fiction
      b. NonFiction
   3. Editing Technology and Techniques
      a. Digital Nonlinear Editing
         i. Digitizing or Capture Video and Film
         ii. Digital Nonlinear Editing Hardware
         iii. Remote Nonlinear Video Editing
         iv. Digital Nonlinear Editing Software

L. Sound Editing
   1. Introduction
      a. Realist
      b. Modernist
      c. Post Modernist
   2. Digital Nonlinear Editing Editing
      a. Digital Non-Linear Editing Hardware
      b. Digital Non-Linear Editing Software

M. Animation and Special Effects
   1. Animation
      a. Principles of Animation
      b. Storyboards and Animation Preproductions
      c. Types of Animation
         i. Animation by Computer
            a. Animation Techniques
            b. Animation File Formats
      d. 3-D Computer Animation
      e. Motion Capture
      f. Animation on the Web
      g. Making Animation That Works
         i. A Rolling Ball
         ii. A Bouncing Ball
         iii. Creating an Animated Scene
   2. Special Effects
      a. Digital Effects
      b. Camera Effects
      c. Optical Effects
      d. Models and Minatures
      e. Physical Effects
   3. The Power of Motion

N. Designing for the World Wide Web
   1. Developing for the Web
DM G100-Digital Media, Introduction

a. HTML is a Markup Language
b. The Desktop Workspace
c. The Small-Device Workspace
d. Nibbling

2. Text for the Web
   a. Making Columns of Text
   b. Flowing text Around Images

3. Images for the Web
   a. Gif and PNG Images
   b. JPEG Images
   c. Using Photoshop
   d. Backgrounds
   e. Clickable Buttons
   f. Client-Side Image Maps

4. Sound for the Web

5. Animation for the Web

6. Video for the Web

O. The Future and Your Career
   1. Economic Convergence
   2. Technilogocal Convergence
   3. Impact of Convergence on Employment
   4. Preparation for a Digital Media Career
      a. Internship
      b. Job Search
      c. Networking

5. Application Process
   a. Resume
   b. Cover Letter
   c. Portfolio
   d. Freelancing
   e. Representation

METHODS OF INSTRUCTION:

A. Lecture:
B. Online:

INSTRUCTIONAL TECHNIQUES:

A. Lecture by teacher .
B. Class discussion conducted by teacher .
C. Recitation oral questions by teacher answered orally by students .
D. Discussion groups conducted by selected student chairpersons .
E. Lecture-demonstration by teacher
F. Lecture-demonstration by another instructor(s) from a special field (guest speaker)
G. Presentation by a panel of instructors or students
H. Presentations by student panels from the class: class invited to participate
   I. Student reports by individuals
   J. Student-group reports by committees from the class
K. Textbook assignments
   L. Field trips
COURSE ASSIGNMENTS:
Reading Assignments
   A. Textbook
   B. Websites
   C. Handouts

Out-of-class Assignments
Research and write a resume for entry level employment in digital media field.

Research and compile a list of the five most readable fonts types used in online and printed materials.

Writing Assignments
Students are expected to complete a project plan for a digital media project. This two to five page plan will consider video needs (equipment needed, storyboarding, lighting, camera positioning plan, etc.), audio needs (equipment needed, sound acquisition, mix setup, equalization, compression, reverberation potential, etc.), and post-production considerations (web usage, compression for video/audio transmission, editing, and special effects).

METHODS OF STUDENT EVALUATION:
Midterm Exam
Final Exam
Short Quizzes
Written Assignments
Essay Examinations
Objective Examinations
Report
Projects (ind/group)
Problem Solving Exercises
Oral Presentations
Skills Demonstration

Demonstration of Critical Thinking:
Students will be able to make a basic assessment of a digital media project to determine the video needs, audio needs, web needs and special processes/effects needs to complete the task.

Required Writing, Problem Solving, Skills Demonstration:
Students are expected to complete a project plan for a digital media project. This two to five page plan will consider video needs (equipment needed, storyboarding, lighting, camera positioning plan, etc.), audio needs (equipment needed, sound acquisition, mix setup, equalization, compression, reverberation potential, etc.), and post-production considerations (web usage, compression for video/audio transmission, editing, and special effects).

TEXTS, READINGS, AND RESOURCES:
TextBooks:

LIBRARY:
Adequate library resources include:
- Print Materials
- Non-Print Materials
- Online Materials
- Services

Comments:

Attachments:
- Attached Files