

### Course Outline

**COURSE:** CSIS 116                      **DIVISION:** 50                      **ALSO LISTED AS:** DM 116

**TERM EFFECTIVE:** Spring 2009                      **Inactive Course**

**SHORT TITLE:** DVD AUTHORIZING

**LONG TITLE:** DVD Authoring

<u>Units</u>	<u>Number of Weeks</u>	<u>Type</u>	<u>Contact Hours/Week</u>	<u>Total Contact Hours</u>
2	18	Lecture:	1.5	27
		Lab:	1.5	27
		Other:	0	0
		Total:	3	54

#### **COURSE DESCRIPTION:**

Study of the artistic and technical aspects of authoring interactive DVDs (Digital Video/Versatile Disk). Special attention will be given to interactive design and the integration and conversion (encoding) of time-based media (e.g., multi-angle video, animation, Dolby sound) special to this media format. Students will be able to produce their own DVD of video, slide shows, and/or interactive games. This course has the option of a letter grade or pass/no pass. May be repeated two times for credit. Also listed as DM 116. **ADVISORY:** CSIS 1 or CSIS 2/2L or equivalent computer experience

**PREREQUISITES:**

**COREQUISITES:**

**CREDIT STATUS:** D - Credit - Degree Applicable

#### **GRADING MODES**

- L - Standard Letter Grade
- P - Pass/No Pass

**REPEATABILITY:** R - Course may be repeated  
Maximum of 2 times

#### **SCHEDULE TYPES:**

- 02 - Lecture and/or discussion
- 03 - Lecture/Laboratory
- 04 - Laboratory/Studio/Activity

## **STUDENT LEARNING OUTCOMES:**

1. Analyze a proposed DVD project to determine what digital graphic, video, and audio assets would be required.
2. Deduce what equipment, artistic concept, technical concerns, and encoding algorithms will be needed to meet the results of the above analysis.
3. Identify where proper marker points, menus, subtitles, stories would be placed in a DVD project.
4. Apply good design aesthetics while creating still and motion menus with appropriate buttons.
5. Be able to analyze a project and synthesize a storyboard and flow chart.
6. Be able to operate complex computer/software for the creation on interactive DVDs.
7. Understand the fundamental artistic and technical aspects of authoring digital video disks.
8. Produce a short DVD that can be played in a consumer set-top DVD player.
9. Understand and solve the associated problems of preparing assets such as audio, video, and graphics.
10. Be able to explain the future ramifications of DVD media production.
11. Be able to write a short nonlinear script for possible publication on DVD.

## **CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS**

Inactive Course: 03/25/2013

Inactive Course: 12/08/2008

### **WEEK HOURS CONTENT:**

1-2 3 Lecture: Introduction to the class. Define outcomes, grading, assignments, and lab hours. Uses for the DVD format. Overview of the DVD creation process: Creating source material, encoding video and audio, and authoring. Discuss relevant technology, especially what the class will use: digital video editing, digital audio, editing, and DVD authoring software. Homework: Read the video editing software tutorial. Read the handouts on the DVDs format.

3 Lab assignment: Go to lab, log in, and get acquainted. Watch two of the selected DVDs. Write a short report on why they are different than VHS tape.

3-4 3 Lecture: Discuss the concept of nonlinear editing and storytelling. Discuss and demonstrate creating audio and video for use in DVD. Collecting the assets. Concept of tracks. Demonstration of the software and hardware used in the lab. Homework: Read chapters and handouts on editing and conversion of video for DVD use. Read tutorial on

DVD lite software. Write a short nonlinear script (story) for a possible DVD project.

3 Lab assignment: Go through the online tutorial for the video editing software. Work through the tutorial for the DVD lite authoring software.

5-6 3 Lecture: Discuss the use of sound in DVD. Discuss the aesthetics of sound combined with video.

Demonstrate capturing/editing sound to match it to video. Discuss use of still images, especially for menus. Discuss the use of metaphor in menu and icon design. Demonstrate the DVD creation process.

Homework: Read handouts and chapter on sound images. Write a short description for a DVD project of your own.

3 Lab assignment: Digitize a sound track. Finish the tutorial. Work on creating assets for a DVD project of your own.

7-8 3 Lecture: Discuss storyboarding and flow charts. Discuss overall project design. Using slideshows, outtakes, and motion menus. Explain consistency in look and feel.

Homework: Read handouts, manual, or chapter on project design. Read section in the manual on creating motion menus. Construct a storyboard and flow chart of your project.

3 Lab assignment: Complete gathering and creating assets. Using computer and DVD authoring lite software, create your project.

9-10 3 Lecture: Using professional DVD authoring software: Demonstrate and discuss adding tracks, previewing audio, creating multi-angle tracks, creating still menus, creating motion menus, adding markers, creating a slideshow, linking buttons, and setting a startup action. Designing for set-top DVD player. Expanding the DVD: creating a story, and interactive markers. Adding subtitles and writing simple scripts. Testing and building the project.

Homework: Read tutorial on professional DVD authoring software. Study material on concepts and terminology of DVD authoring.

3 Lab assignment: Work through the professional DVD authoring software tutorial.

11-12 3 Lecture: Discuss and demonstrate preparing source material: capturing video at 16:9 aspect ratio, encoding video to MPEG format and for multi-angle tracks, preparing audio content, AC3 encoding using the A.Pack. Createing graphics for still menus and video for motion menus and interactive markers.

Building menus for multiple languages. Creating graphics for slideshows.

Homework: Read the appropriate chapters in the text.

Develop, storyboard, and flow chart a final project incorporating at least one multi-angle view. Have instructor OK project. Gather assets.

3 Lab assignment: Begin work on project by creating and preparing assets.

13-14 3 Lecture: Discuss and demonstrate setting preferences, disk properties and remote controls for new project.

Discuss and show views (windows): graphical, project, property inspector, matrix, editors, and preview mode. Discuss/demonstrate using the subtitle editor: linking, importing, changing location, etc. Compiling subtitle streams. Using multiple language audio.

In slideshows.

Homework: Read in the software manual about preferences and subtitles. Gather or create more assets.

3 Lab assignment: In the DVD authoring software, set your preferences and properties for your project. Import your assets. Create and link subtitles.

15-16 3 Lecture: Demonstrate what scripting does and it is used creatively. Discuss how to create and assign scripts. Discuss scripting details: assigning global variables, functions, commands, labels, parameters, registers, and comments. Using the preview mode to see the project. Discuss and demonstrate how to debug the project, finding unassigned and missing asset files, using the project description files and log window, and tracking multiplexing problems.

Demonstrate creating the disk.

Homework: Read handouts and chapters on scripting, debugging, previewing, and creating a final disk.

3 Lab assignment: Using the computer, write and assign necessary scripts to the project. Preview the project and debug if necessary. Create the final disk. Burn the disk and test it on a set-top player.

17 1.5 Lecture: Review debugging process and creating the final disk. Discuss advanced DVD concepts like producing Golden Masters, DVD audio format, and recording/processing Dolby 5.1 sound. Discuss future implications of DVD media.

Homework: Read material on Dolby 5.1 sound recording, and producing master disks. Study for final exam.

1.5 Lab assignment: Finish the project if needed.

18 2 Final Exam.

COURSE OBJECTIVES:

#### Weeks 1-2

Students will be able to explain the DVD format, what technology is involved, and the artistic possibilities of its use including nonlinear storytelling. They will be able to explain the types of compression and decompression. They will show understanding of digital video and audio.

#### Weeks 3-4

Students will be able to demonstrate the basics of editing video for use in DVD authoring. They will understand what assets are necessary for DVD authoring.

#### Weeks 5-6

Students will be able to record/digitize music to be used for a sound track. They will be able to explain storyboarding and flow charts. They will be able to discuss the importance and use of still images in DVD creation. They will understand menus: their creation and use. They will be able to explain the use of metaphor in menu and icon design.

#### Weeks 7-8

Students will be able to explain the importance of being consistent in design. They can demonstrate the process of gathering and creating assets for a project. They will be able to author a simple project of their own design.

#### Weeks 9-10

Students will be able to converse using common DVD authoring terminology. Students will be able to work tutorial on authoring a DVD project. They will be able to build the final project, thus creating a working DVD.

#### Weeks 11-12

Students will be able to explain differences in AC3 and 5.1 sound formats. They will be able to encode sound in AC3. They will be able to create still and motion menus. They will be able to create graphics for slideshows.

#### Weeks 13-14

Students will be able to setup the authoring software to start a new project. They will be able to analyze their project flow chart and determine what subtitles will be needed and where they go. They will be able to import their project assets.

#### Weeks 15-16

Students will be able to write scripts. They will be able to preview and analyze the results. They will be able to debug the project using their analysis. They will be able to create a final DVD disk.

#### Week 17

Students will be able to explain advanced DVD concepts such as recording Dolby 5.1 surround sound. They will be able to explain the materials and procedure to have DVDs mass replicated. They will be able to pass the final exam.

**METHODS OF INSTRUCTION:**

Lecture, computer demonstration, web, and other media examples

**METHODS OF EVALUATION:**

The types of writing assignments required:

Written homework

The problem-solving assignments required:

Homework problems

Exams

Other: Project development problems

The types of skill demonstrations required:

Class performance

Other: Project development work

The types of objective examinations used in the course:

Multiple choice

True/false

Completion

Other category:

None

The basis for assigning students grades in the course:

Writing assignments: 10% - 20%

Problem-solving demonstrations: 20% - 30%

Skill demonstrations: 30% - 40%

Objective examinations: 20% - 20%

Other methods of evaluation: 0% - 0%

**REPRESENTATIVE TEXTBOOKS:**

Apple Computer, Inc. ^uDVD Studio Pro User's Manual^s, 2002  
or other appropriate college level text.

Reading level of text: 13 Grade

Other Materials Required to be Purchased by the Student:

ZIP disk, DVDR, DVDRAM, CDR media

**ARTICULATION and CERTIFICATE INFORMATION**

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 200230

UC TRANSFER:

Not Transferable

**SUPPLEMENTAL DATA:**

Basic Skills: N

Classification: I

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable  
Special Class Status: N  
CAN:  
CAN Sequence:  
CSU Crosswalk Course Department: CSIS  
CSU Crosswalk Course Number: 116  
Prior to College Level: Y  
Non Credit Enhanced Funding: N  
Funding Agency Code: Y  
In-Service: N  
Occupational Course: D  
Maximum Hours:  
Minimum Hours:  
Course Control Number: CCC000378811  
Sports/Physical Education Course: N  
Taxonomy of Program: 061410