

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

Transfer course A.A. degree applicable course

(check all that apply)

COURSE NUMBER AND TITLE:

GC *144* Web Graphics

UNIT VALUE:

3

MINIMUM NUMBER OF SEMESTER HOURS:

96

BASIC SKILLS REQUIREMENTS:

Appropriate language and basic computer skills

ENTRANCE REQUIREMENTS

PREREQUISITE: None

COREQUISITE: None

RECOMMENDED PREPARATION: GC140 Digital Imaging w/Photoshop
GC202 Web Page Layout I

SCOPE OF COURSE:

Design and production of Web page graphics using current graphics editing applications, for inclusion in Web pages and other display media. Mechanics for image production as well as methodologies for image size reduction, scanning of existing images, GIF animation and Javascript rollovers. GIF and JPEG file formats, image resolution, color depth. Elements of a Graphical User Interface.

SPECIFIC COURSE OBJECTIVES:

The successful student will be able to:

1. Create graphics for web pages with maximum impact and minimum download times.
2. Design and create graphics that are browser-neutral, cross-platform, and resolution-independent.
3. Demonstrate an understanding of the limits of monitor resolution and its consequences.
4. Demonstrate the ability to scan and apply results.
5. Demonstrate the ability to determine the appropriateness of the two Web graphic file formats, GIF and JPEG.
6. *Demonstrate competence in using the Web safe color palette.*
7. Demonstrate the ability to create graphics that look well on a range of monitor resolutions, from 256 to millions of colors.
8. Demonstrate the ability to optimize graphic file sizes by methods such as bit depth reduction.
9. Demonstrate the ability to successfully use transparency without creating a halo effect.
10. Demonstrate competence in slicing up a large graphic and laying out the pieces in a web page using tables.
11. Demonstrate the ability to create GIF animations.
12. Demonstrate the ability to create navigation graphics and buttons.
13. Understand and incorporate Javascript rollover behavior to graphics in Web pages.
14. Identify and apply principles of GUI design.
15. Identify and apply standards for screen layout of Web pages.
16. Identify and apply standards for navigation in Web pages.
17. Demonstrate the ability to create background graphics which do not detract from foreground content.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. MODULE 1: Graphic File Concepts
 - A. RGB colorspace
 - B. Decimal and Hexadecimal notation
 - C. Bit depth
 - D. Image resolution for display
 - E. Web-safe color
 - F. Dithering

G. GIF and JPEG file formats

1. GIF

- a. Maximum 8-bit color
- b. Indexed
- c. Lossless compression
- d. Use with cartoon-like art
- e. Transparency
 - (1) Preventing halos
- f. Animation
- g. Interlacing
- h. Alpha channel

2. JPEG

- a. 24-bit color
- b. Lossy compression
 - (1) Consequences
- c. Compression levels
- d. Use with photo-realistic art
- e. Progressive JPEGs

3. Limitations

4. Advantages

5. When to use

H. Platform monitor gamma

I. Anti-aliasing

1. Advantages

2. Disadvantages

J. Text graphics

1. Browser text

- a. "12 pt" font display is 12 pt print (Macintosh)
- b. "12 pt" font display is 16 pt print (Windows)

2. Text graphic as alternative

- a. Cross-platform uniformity
- b. Independent of installed fonts

K. Bitmap and vector graphics

1. Advantages

2. Disadvantages

L. Copyright issues

II. MODULE II: Interface Design

A. Graphical User Interface

B. Usability

C. Design and Layout

III. MODULE III: Graphic Application

A. Photoshop

- 1. Create a button graphic
 - a. Rectangle

- (1) Curved corners
- b. Fill
- c. Bevel
- d. Text
- e. Drop Shadow
- f. Index
- g. Export
- h. Changes? Recreate graphic

B. Fireworks

- 1. Create a button graphic
 - a. Rectangle
 - (1) Curved corners
 - b. Fill
 - c. Bevel
 - d. Text
 - e. Drop Shadow
 - f. Export
 - g. Changes? Edit
- 2. Bitmap/Image Edit mode
 - a. Restricted set of Photoshop features
 - b. Photoshop filters
- 3. Vector mode
 - a. Illustrator/Freehand
 - b. Object oriented
 - (1) Live Effects
- 4. Benefits of vector and bitmap editing in single application
- 5. Toolset
 - a. Bitmap tools
 - (1) Marquee
 - (2) Lasso/Magic Wand
 - (3) Paint Bucket
 - (4) Rubber Stamp
 - (5) Eraser
 - (6) Open/Import
 - b. Vector tools
 - (1) Line
 - (2) Rectangle/Ellipse/Polygon
 - (3) Pencil
 - (4) Pen
 - (5) Text
 - (6) Brush
- 6. Slicing large graphics
- 7. Imagemaps
- 8. Javascript rollovers

9. Animation
 - a. Frame by frame
 - b. Tweening
 - c. Importing images
 10. Exporting
 - a. Preview panes
 - b. File types
 - c. Bit depths
 - d. Optimizations
 - e. HTML
- C. Practical Application
1. Buttons
 2. Text Graphics
 3. GIF animations
 4. Layout design
- D. Incorporating into Web Pages
- E. Uploading to a Server

REQUIRED READING:

Cohen, Sandee. Visual Quickstart Guide: Fireworks2 for Windows and Macintosh. PeachPit Press, 1999. ISBN: 0201354586.

SUGGESTED READING:

Williams, Robin. The Non-Designers Design Book, PeachPit Press, 1994. ISBN: 1566091594.

Williams, Robin and Tollett, John. The Non-Designers Web Book, PeachPit Press, 1998. ISBN: 020168859X.

REQUIRED WRITING:

Final Paper (2-5 pages) on current web design issue or topic covered in class.

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short term classes.

Students will work on and complete both in-class practice and take home homework assignments. The in-class practice assignments focus on learning a particular tool or skill; the homework assignments concentrate on the practical application of course material.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- lecture-laboratory combination
- directed study

This course may be offered as a distance education course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.

Yes No

If yes, check all that apply. (See guidelines for preparation for definitions.)

- telecourse
- mediated instruction
- computer assisted instruction

GRADING POLICY AND STANDARDS (include methods of determining whether the stated objectives have been met by students):

- 20% Final Presentation
- 10% Written assignments
- 60% Assignments
- 10% Exams

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?

Yes No Number of times course may be taken for
credit:

If yes, identify specific provision of Title 5 Division 2 section(s) 55761-55763 and
58161 which qualifies course as repeatable:

581161(c)(2)(A)

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