# College of San Mateo Official Course Outline

1. **COURSE ID:** DGME 168 **TITLE:** Web and Mobile Design II

**Units:** 3.0 units **Hours/Semester:** 40.0-45.0 Lecture hours; 24.0-27.0 Lab hours; and 80.0-90.0 Homework hours

**Method of Grading:** Grade Option (Letter Grade or Pass/No Pass)

**Recommended Preparation:** 

Eligibility for ENGL 838 or ENGL 848 or ESL 400.

DGME 167, and DGME 111 or equivalent.

## 2. COURSE DESIGNATION:

**Degree Credit** 

Transfer credit: CSU

#### 3. COURSE DESCRIPTIONS:

# **Catalog Description:**

Students learn advanced concepts and techniques to create elaborate and visually appealing content for a variety of devices. User centered design, graphic user interface customization, Internet ethics, and copyright issues are taught as well as a review of basic color, layout and typography theory and practice. Some HTML, CSS, JavaScript, and CGI concepts are demonstrated to incorporate basic interactivity. Some familiarity with Adobe Photoshop is presumed. Software: Adobe Creative Cloud®

# 4. STUDENT LEARNING OUTCOME(S) (SLO'S):

Upon successful completion of this course, a student will meet the following outcomes:

- 1. Analyze and implement appropriate interface metaphors and interaction design principles to web/mobile projects depending on their target audience, scope and technical specifications.
- 2. Create dynamic website menus using cascading style sheets and html.
- 3. Implement a basic CGI script into an HTML form.

#### 5 SPECIFIC INSTRUCTIONAL OBJECTIVES:

Upon successful completion of this course, a student will be able to:

- 1. Evaluate CSS, typography for mobile/web
- 2. Demonstrate FTP competency
- 3. Create promotion for the web/mobile site using metatags, search engine registration, and advanced site management.
- 4. Identify and demonstrate fundamental usability concepts and Section 508 standards
- 5. Demonstrate file management (local & remote) and integration with other software programs
- 6. Demonstrate advanced image treatment and web/mobile galleries utilizing Photoshop, CSS and JavaScript

## 6. COURSE CONTENT:

#### **Lecture Content:**

- A. Dreamweaver Review
  - a. Defining sites & File management and basic functionality
- B. The importance of User-centered Web Design
  - a. User Centered Website design defined
  - b. User Psychology. Layout, color and Navigation
- C. Library items and the creation of templates in Dreamweaver for web and mobile
- D. Adobe Bridge automated Web Gallery
  - a. Integrating a Photoshop or Bridge created gallery into your Dreamweaver site
- E. Advanced image treatment in Photoshop for maximum optimization
  - a. SVG images
  - b. Making small GIFs, making animated GIFs and making JPGs
  - c. PNG whys and wherefores
  - d. Other image compression issues
- F. Typography for web and mobile
  - a. Cascading Style Sheets
  - b. Design principles

- c. Browser vs. Graphic Text
- G. Basic Cascading Style Sheet (CSS) functionality
  - a. Browser Rendering
  - b. Layout
  - c. Fonts
  - d. Colors
- H. Basic JavaScript Functionality
  - a. Behaviors, Pop-up windows, Jump Menus and Alert Messages
- I. Forms
  - a. Creating Forms in Dreamweaver
  - b. Processing the data and Basic CGI and server capabilities
- J. Getting your site noticed
  - a. Metatags and Search engine registration
- K. Responsive Web Design
  - a. Designing for desktop, tablet and mobile devices
  - b. Dreamweaver Bootstrap
  - c. Media Queries
- L. Copyright issues in the digital world
  - a. Internet Ethics
  - b. Fair Use of materials
  - c. Digital Millennium Act
- M. Advanced Graphic User Interface Design (GUI)
  - a. Photoshop
- N. File Transfer Protocol (FTP remote)
- O. File management (local & remote)
- P. Integration and workflow with other software

## **Lab Content:**

Students use lab time to complete projects and textbook assignments under the guidance of the instructor. Students will complete lab exercises and assignments that reinforce the lecture material along with strengthening their skills utilizing the appropriate software.

# 7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

- A. Lecture
- B. Lab
- C. Activity
- D. Critique
- E. Discussion
- F. Guest Speakers
- G. Observation and Demonstration
- H. Other (Specify): A. Lecture / Discussion -Encompassing in-class demonstrations & explanations on course topics B. Labs -Students will demonstrate examples of course topics on lab computers C. Reading assignments -Students will be given a reading assignment to become familiar with the material presented in a corresponding lecture, lab, or quiz D. Project assignments -Students will be given a project assignment to demonstrate their knowledge of the software

## 8. REPRESENTATIVE ASSIGNMENTS

Representative assignments in this course may include, but are not limited to the following:

## **Writing Assignments:**

Written short answer and short paragraphs incorporated in assignments and projects.

#### **Reading Assignments:**

Weekly reading from course textbook and resources.

# **Other Outside Assignments:**

Completion of homework assignments.

## 9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Class Participation
  - B. Class Work
  - C. Exams/Tests

- D. Group Projects
- E. Homework
- F. Lab Activities
- G. Oral Presentation
- H. Papers
- I. Portfolios
- J. Projects
- K. Quizzes
- L. Projects -Students will be assigned projects to execute to specifications. -Students will be graded on performance of these projects. Quizzes, Mid Term and Final -Students will be tested on their retention of important principles In-class Demonstrations -Students will be asked to demonstrate course topics Writing -Students will submit written proposals, forums, and papers to demonstrate knowledge of web concepts and theory.

# 10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

- A. Lynch, P and Horton, S. Web Style Guide, 3rd edition: Basic Design Principles for Creating Web Sites, 3rd ed. Yale University Press, 2015
- B. Krug, Steve. Don't Make Me Think, Revisited: A Common Sense Approach to Web Usability, 3rd Edition ed. Voices Matter, 2014
- C. Adobe Creative Team. *Adobe Dreamweaver CC Classroom in a Book (2015 release)*, 1st ed. Adobe Press, 2015

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Course Originator: Diana Bennett