#### College of San Mateo Official Course Outline

# 1. COURSE ID: DGME 169 TITLE: Web and Mobile Design III: Mobile First Design

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 168, or equivalent. DGME 111 or equivalent

## 2. COURSE DESIGNATION:

Degree Credit Transfer credit: CSU

# **3. COURSE DESCRIPTIONS:**

## **Catalog Description:**

Students utilize HTML & CSS skills to create mobile first and responsive websites. Students will learn the fundamentals of responsive web design (RWD) that include media queries, fluid grids and flexible images. Mobile first design will be an essential theme of the course, as well as User Experience and Interactive Design strategies. Students will develop a functional prototype. Software: Adobe Creative Suite®

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

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

- 1. Describe responsive web design process.
- 2. Demonstrate responsive design using a bootstrap framework.
- 3. Demonstrate media queries, fluid grids and flexible images.

## 5. SPECIFIC INSTRUCTIONAL OBJECTIVES:

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

- 1. Understand responsive design and its importance.
- 2. Demonstrate a mobile first approach to design to make sure the user experience is the same regardless of the device size.
- 3. Understand and be able to apply media queries
- 4. Understand and be able to apply fluid grids
- 5. Understand and be able to apply flexible images
- 6. Overcome common design problems by applying user experience and interactive design
- 7. Demonstrate Bootstrap front-end frame work

# 6. COURSE CONTENT:

#### Lecture Content:

- A. Overview of Web Design II (DGME 168)
- B. What is responsive design
- C. Mobile first design
- D. Fluid Grids
- E. Viewport meta tag
- F. Media queries and breakpoint
- G. Responsive images
- H. CSS flexbox
- I. Bootstrap (front-end framework)

#### 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. Critique
- D. Discussion
- E. Guest Speakers
- F. Observation and Demonstration
- G. Other (Specify): A. Lecture/Discussion -Encompassing in-class demonstrations and 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. Assignments/Projects -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. Assignments/Projects -Students will be assigned projects to execute to specifications. -Students will be graded on performance of these assignments/projects. Quizzes, Mid Term and Final Exams -Students will be tested on their retention of important principles Class Demonstrations -Students will be asked to demonstrate course topics

# 10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

A. Shay Howe. *Learn to Code HTML and CSS: Develop and Style Websites*, 1st ed. San Francisco: New Riders, 2014

Origination Date: September 2018 Curriculum Committee Approval Date: January 2019 Effective Term: Fall 2019 Course Originator: Diana Bennett