

**College of San Mateo
Official Course Outline**

1. **COURSE ID:** DGME 164 **TITLE:** User Interface/User Experience 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:

DGME 211, and DGME 110

2. **COURSE DESIGNATION:**

Degree Credit

Transfer credit: CSU; UC

3. **COURSE DESCRIPTIONS:**

Catalog Description:

Covers the fundamentals of user-centered interface design concepts and practices for web, mobile devices, and other applications. Students gain an understanding of how users interact with an interface and be introduced to the concepts of usability, interface associations and aesthetics, and the user experience. Basic knowledge of Adobe Illustrator and Photoshop is required. 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. Evaluate the usability of user interfaces, including web pages and mobile application interfaces, and be able to articulate successful implementation and suggest areas for improvement.
2. Redesign poorly structured interfaces, improving their usability/accessibility as demonstrated by usability testing.
3. Create an effective user interface for web or mobile device usage. Demonstrate effectiveness of design via usability testing.

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**

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

1. Evaluate, redesign, and create effective user interfaces for a variety of uses, including web pages, mobile applications, and application interfaces.
2. Assess an existing user interface for usability, utilizing knowledge of design as well as usability testing.
3. Redesign an existing user interface to improve usability on a variety of platforms, including mobile applications and web pages.
4. Create a UI/UX design proposal including pitch documents, wireframe, and statement of work.
5. Demonstrate and articulate knowledge of the particular design challenges associated with mobile vs. web UI/UX design.

6. **COURSE CONTENT:**

Lecture Content:

1. Discussion of theory and concepts of user interface/user experience design
 - A. Interface layout
 - B. Eye path/eye travel
 - C. User presumptions regarding most used elements
2. Introduction to means of assessing effectiveness of interface design
 - A. Focus groups
 - B. Analytics
 - C. Usability testing
3. How to identify areas for improvements in existing interfaces
 - A. User observation
 - B. Best practices adoption
4. How to propose/execute interface revisions, test revisions for effectiveness
 - A. Collecting data on interface usage
 - B. User interviews
 - C. User testing
5. Discussion of comparison/contrasting interface design by application type

- A. Web
 - B. Mobile
 - C. Social gam
 - D. Console game
 - E. PC game
6. How to design document/mockup to test layout
 - A. Paper mockup
 - B. Wireframes
 - C. User testing
 7. Means by which interface components (graphics, text, backgrounds) are designed
 - A. Design style considerations
 - B. Graphic element resolution
 - C. Corporate/organizational style guide
 - D. Designing for target device
 8. Discussion of methods of testing interface design
 - A. Wireframes
 - B. Paper mockups
 - C. Online mockups
 - D. Focus groups
 9. Revising design based on test results
 - A. Getting clear user feedback
 - B. Interpreting unclear feedback
 - C. Asking probing questions
 - D. Iterative revision versus wholesale change

Lab Content:

Lab time will be completed in Digital Media Center, where students will apply their learning by demonstrating the design to production phases and integration with appropriate software.

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 reading assignments 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 and theory.

8. REPRESENTATIVE ASSIGNMENTS

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

Writing Assignments:

- Assignment/Project Assignment
 - 5-6 short answer and essay answer questions per assignment [4-5 assignments per topic], approx. 25-100 words per answer, weekly.
 - 10-15 written short answers incorporated in the 10-15 assignments and 5-6 projects, approx. 25-100 words per answer, weekly.
- Student Reflection Assignment
- Midterm
- Final Exam

Reading Assignments:

- Textbook - Required readings from chapters

- Weekly reading from the course textbook [1-2 chapters] approx. 30-50 pgs./week
- Online Resources
- Instructor Resources

Other Outside Assignments:

Completion of homework assignments.

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- Class Participation
- Class Performance
- Class Work
- Exams/Tests
- Group Projects
- Homework
- Lab Activities
- Oral Presentation
- Papers
- Portfolios
- Projects
- Quizzes
- Written examination
- Projects - Student will be assigned projects to execute to specifications. Students will be graded on performance of these projects.
 - Quizzes/Midterm/Final Exam -Students will be tested on their retention of important principles
 - In-class Demonstrations -Students will make presentations and demonstrate course topics

10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

- Bluth, N. *UX Workbook: A Collection of Guided Tools, Techniques, and Resources*, 1st ed. Independently published, 2021

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Course Originator: Diana Bennett