

SAN DIEGO COMMUNITY COLLEGE DISTRICT
CONTINUING EDUCATION
COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

COMM 670

COURSE TITLE

WEB DEVELOPMENT FUNDAMENTALS

TYPE COURSE

NON-FEE

VOCATIONAL

CATALOG COURSE DESCRIPTION

This course introduces students to web development concepts and techniques. The purpose of this course is to provide a general overview of how the web works and to ensure that students have a foundational understanding of how various web-related technologies work together and what skills are needed to begin building websites. Topics covered include an overview of the internet, file management in relation to web development, components of a website, basic introduction to Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), and image editing for the web. (FT)

LECTURE/LABORATORY HOURS

48

ADVISORIES

NONE

RECOMMENDED SKILL LEVEL

Possess a 10th grade reading level; ability to communicate effectively in the English language.

INSTITUTIONAL STUDENT LEARNING OUTCOMES

1. Social Responsibility
SDCE students demonstrate interpersonal skills by learning and working cooperatively in a diverse environment.
2. Effective Communication
SDCE students demonstrate effective communication skills.
3. Critical Thinking
SDCE students critically process information, make decisions, and solve problems independently or cooperatively.
4. Personal and Professional Development
SDCE students pursue short-term and life-long learning goals, mastering necessary skills and using resource management and self-advocacy skills to cope with changing situations in their lives.

COURSE GOALS

1. Understand how the Internet works
2. Understand how the Web works
3. Understand key terminology
4. Proficiency in file management skills and how they relate to web development
5. Exposure to HTML basics
6. Introduction to CSS basics
7. Overview of image concerns and preparation as they pertain to the Web

COURSE OBJECTIVES

Upon successful completion, the student will be able to:

1. Identify the necessary components of the internet
2. Explain how the Web works
3. Have knowledge of web-related terminology
4. Demonstrate an understanding of file management in relation to web development
5. Demonstrate a basic understanding of HTML
6. Demonstrate a basic understanding of CSS
7. Demonstrate knowledge of image formats and how they are used on the web
8. Ability to specify the best format depending on the image type
9. Demonstrate an understanding how to optimize images for web use

SECTION II

COURSE CONTENT AND SCOPE

1. Course orientation and working online
 - 1.1. Ensure that you are ready to work online
 - 1.2. Ensure that your equipment is up-to-date and ready for online learning
 - 1.3. Get to know Canvas
 - 1.4. Customize Canvas
 - 1.5. Interact within Canvas
 - 1.6. Get up and running with Zoom
2. Web introduction
 - 2.1. How the Internet works
 - 2.2. How the Web works
 - 2.3. Terminology
 - 2.4. Working with packets
 - 2.5. Important terms
 - 2.6. Hosting overview
 - 2.6.1. Hosting providers
 - 2.6.2. Using web hosting
 - 2.7. Domain Services
 - 2.7.1. Register domain names
 - 2.7.2. Update settings
 - 2.7.3. Managing domain names
3. File management/planning
 - 3.1. Dealing with files
 - 3.2. Proper naming conventions
 - 3.3. File paths
 - 3.4. Planning a website
 - 3.5. Introduction to User Experience (UX)
4. Getting started with web development
 - 4.1. Beginning HTML
 - 4.2. HTML tags
 - 4.3. HTML tag anatomy
 - 4.4. XHTML vs HTML5
5. Basic formatting
 - 5.1. Formatting text
 - 5.2. Creating links
 - 5.2.1. Relative links
 - 5.2.2. Absolute links
 - 5.3. Working with lists
 - 5.4. Creating a simple navigation
6. Validating code
 - 6.1. Creating valid code
 - 6.2. Checking your code for errors
 - 6.3. Correcting errors
7. Introduction to CSS
 - 7.1. What is CSS?

COURSE CONTENT AND SCOPE (CONTINUED)

- 7.2. Why should we use it?
- 7.3. Authoring CSS
- 7.4. Anatomy of a tag
- 7.5. Document hierarchy
- 8. Basic CSS formatting
 - 8.1. Way to style your document
 - 8.1.1. Inline
 - 8.1.2. Embedded
 - 8.1.3. Linked
 - 8.2. Selector types
 - 8.2.1. Element
 - 8.2.2. Class
 - 8.2.3. Id
 - 8.3. Contextual selectors
 - 8.4. Targeting elements
 - 8.5. Basic page styling
- 9. Working with images
 - 9.1. Sizing for the Web
 - 9.2. Web friendly formats
 - 9.2.1. JPG
 - 9.2.2. GIF
 - 9.2.3. PNG
 - 9.2.4. SVG
 - 9.3. Picking the appropriate file type
- 10. Quick start with web planning
 - 10.1. Introduction to web planning tools
 - 10.2. Overview of how to use a web planning application
 - 10.3. Basics of web layout and design

APPROPRIATE READINGS

Reading assignments of appropriate reading level may include, but are not limited to, materials such as a textbook, supplemental reading assignments, industry-related periodicals or magazines, manuals, videos, television programs about the internet, online help, articles posted on the internet, and information from websites, online libraries, and databases. Topics should be related to basic web development concepts and may include information related to the differences between HTML and CSS and how that may impact your website planning.

WRITING ASSIGNMENTS

Writing assignments may include, but are not limited to, completing assigned reports, providing written answers to assigned questions, performing internet research, and reporting on that research. An example would include a summary of how to utilize various CSS selectors to target HTML elements, reduce redundancies, and simplify selectors in CSS based files.

OUTSIDE ASSIGNMENTS

Outside assignments may include, but are not limited to, appropriate internet research, reading, preparing reports, and studying as needed to perform successfully in class. For instance, an appropriate assignment would include demonstrating how to provide basic CSS to augment default web page presentation.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Assignments which demonstrate critical thinking may include, but are not limited to, building a website using correct file management structure, coding with valid HTML, linking all pages together, adding images that have been optimized for web use, and augmenting the presentation of that content via CSS.

EVALUATION

Evaluation methods may include, but are not limited to, performance in a variety of activities and assignments. For instance, an appropriate assignment would include creating specified deliverables, such as a website that meets current web standards and demonstrates a student's understanding of languages and technologies that are included within the Front-End Web Developer program. Students will need to show they understand portfolio best practice and demonstrate that they can create, publish, and promote. In addition, the course may have quizzes, class participation, written and practical tests, attendance, and punctuality.

Upon successful completion of all courses in the program a Certificate of Program Completion will be issued.

METHOD OF INSTRUCTION

Methods of instruction may include but are not limited to lectures, discussion, hands-on demonstrations, computer-assisted instruction, laboratory assignments, and field trips.

This course, or sections of this course, may be offered through distance education.

TEXTS AND SUPPLIES

Murach's HTML5 and CSS3, Zak Ruvalcaba and Anne Boehm, Murach Publishing, current edition

Recommended Supplies:

Pen, journal (composition book), notebook paper and a soft 3-ring binder (or alternatively, a one-subject 110 sheet college-ruled notebook), and appropriate storage media such as a USB drive, an external hard drive, and/or cloud-based storage.

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PREPARED BY Emily Kay DATE: November 3, 2021

REVISED BY _____ DATE: _____

Instructors must meet all requirements stated in Policy 3100 (Student Rights, Responsibilities and Administrative Due Process), and the Attendance Policy set forth in the Continuing Education Catalog.

REFERENCES:

San Diego Community College District Policy 3100
California Community Colleges, Title 5, Section 55002
Continuing Education Catalog