

#### Fall 2023

# DESIGN X455 - 029 Web Design with HTML5 AND CSS3 2 semester units (30 instructional hours)

#### **BASIC COURSE INFORMATION**

# **Course Meeting Dates & Times:**

Mondays, 6:00-9:00 PM 11 Sep 2023 to 13 Nov 2023

#### **Course Format:**

Live-Online Zoom link:

https://berkeley.zoom.us/j/92508117549?pwd=N3I0Y0hpRGk1aFRZRnNBeWhmcTFVdz09

Live Online courses provide an interactive learning experience with scheduled synchronous online sessions held via Zoom video conferencing (Pacific Time). As with courses held in person, the teaching methods for Live Online courses emphasize lectures, demonstrations, group discussions and collaborative activities. Students should be prepared to attend every session and engage in class via webcam.

**Instructor:** Pamela Wong

E-mail: pamela.wong@berkeley.edu

Instructor Availability: Available by email (checked frequently and best point of contact)

## **Course Online Resources (CANVAS):**

https://onlinelearning.berkelev.edu/

# **Technical Requirements and Access to Online Resources:**

Please check your computer technical specifications. This course uses the Learning Management system (LMS) called CANVAS. In order to use Canvas, your computer will need to meet these <u>technical specifications</u>. Additionally, instructors will use the Zoom web conferencing tool to live-stream their classes. Please also check your computer technical specification to use Zoom and ensure that you have a stable Internet connection. Please review our <u>online classroom orientation resource</u> to learn about how to access and use CANVAS.

#### **Important Deadlines:**

**Drop:** Must be done before the start of the second class meeting.

Withdraw or Grade Option Change: Must be submitted before the last class meeting.

You can add, drop, or withdraw by logging into your student portal.

#### **Course Prerequisites:**

None

### **Course Description:**

Get an introduction to HTML5 and CSS3 to create a small or personal website. After Applying web standards as you code and mastering the fundamentals of web development and design, you then proceed rapidly with semantic coding, starting from text editor in the browser and ending with a website on the Internet. Class discussions include alternative open source software and best practices for usability and HTML accessibility.

Learn to code web pages by creating a website and prototyping interactive sites using InVision to build a complete site worthy of a portfolio piece. You begin with the research phase, then continue to wireframing, prototyping and development. Industry standard tools applied in this course include Visual Studio Code, Figma, Google Chrome browser and GitHub. You build out a final website throughout the class by using HTML5, CSS files, video integration, CSS3 transitions and animations, transformations, responsive web design, version control of code, browser development tools and site deployment. We make coding doable and digestible for designers.

# **Learning Objectives:**

- Understand progressive enhancement as a best practice
- Understand HTML5's document structure
- Implement element semantic coding
- Understand the Document Object Model
- Be able to integrate cascading stylesheets (CSS)
- Be able to identify principles of web design usability and accessibility
- Be able to code web pages to create a personal website
- Be able to identify images for the Web and understand file formats
- Utilize correct file and folder structures
- Be able to identify online resources related to your personal website
- Understand the process to create a web hosting account and optional domain name

#### Methods of Instruction:

- Scheduled synchronous online lectures held via Zoom video conferencing
- Interactive in-class activities
- Supplemental videos
- Demonstrations
- Required reading
- Required writing assignments
- Discussion
- Projects
- Presentations

Peer review

#### **COURSE MATERIALS**

#### **Primary or Required Textbooks/Readings:**

**Textbook Title:** Murach's HTML5 and CSS3

ISBN-13: 978-1943872268 ISBN-10: 1943872260

Publisher: Mike Murach & Associates, Inc. (Copyright @2018)

Author: Anne Boehm and Zak Ruvalcaba

Edition: 4th

# **Other Required Materials:**

1. Visual Studio Code

- 2. GitHub
- 3. Google Chrome
- 4. Figma

#### **CREDIT REQUIREMENTS**

#### **Course Assignments:**

#### • Reading assignments:

• The student is expected to read the chapters that will be discussed in each session ahead of time to familiarize themselves with the material.

# Development Environment Setup:

 Successfully setting up a development environment is a prerequisite to follow through the course.

# Wireframes 1 & 2:

 The student is expected to complete wireframing for 6 webpages to prepare for website development.

## Design 1 & 2:

• The student is expected to complete designing for 6 webpages to prepare for website development.

#### Prototype:

• The student is expected to complete a prototype for the final project to prepare for implementing the website.

# Coding Exercise 1 & 2:

The student is expected to complete coding exercises to prepare for coding the website.

#### Participation:

 The student is expected to peer reviews on a prototype & each webpage, complete class exercises, and ask questions throughout the course.

#### Final Project:

- Code 6 webpages.
- Commit project code base to GitHub repository.
- Host project website on GitHub.
- Complete written summary of final project.
- Present and peer review final project.

#### HTML5 and CSS3 and AI:

Integrating HTML5 and CSS3 with AI can open up new possibilities for creating dynamic, intelligent, and personalized web experiences. Here are two ways HTML5 and CSS3 can be integrated with AI that will be discussed in the course:

- 1. **AI-Powered Content Generation:** Use AI-driven natural language generation (NLG) to dynamically create and update HTML content based on user data and preferences. For example, personalized product descriptions or dynamic landing pages can be generated using AI.
- Responsive Design Optimization: All algorithms can analyze user behavior across different devices and screen sizes to optimize the responsive design of the website using CSS media queries and flexbox/grid layouts.

#### Policies Regarding Using AI Tools in the Web Design with HTML5 and CSS3 Class:

Integrating HTML5 and CSS3 with AI can lead to more personalized, data-driven, and responsive web experiences. By combining the power of AI-driven insights with the flexibility of HTML5 and CSS3, web designers can create websites that adapt to user behavior, preferences, and context, ultimately enhancing the overall user experience.

While we embrace the power of Al-driven technologies, the Web Design with HTML5 and CSS3 class emphasizes the understanding of the concepts behind HTML5 and CSS3 and the hand-on coding. Class projects and assignments include hand-coded HTML5 and CSS3.

Students can use ChatGPT to generate the written content specific to their chosen website topics. However images and videos should be compliance with copyrights. Students should not use AI software to generate images and videos that might involve copyright infringement.

#### **Class Participation and Attendance:**

Please note that good attendance is a prerequisite to meeting classroom discussion and participation expectations.

o It is the student's responsibility to check Canvas and obtain class notes from other classmates in the event of an excused absence.

- o In-class activities may include group discussion, written reflection and assessment activities, and applying learning to cases in-class. Because shared learning and discussion is a large component of this course, there is no "make-up" for activities missed in class.
- Lectures are intended to complement, rather than repeat course readings. Therefore it is the students responsibility to keep up with the reading during the course in order to engage in valuable discussion and critical thinking in class.

Exemplary (90-100%)	<ul> <li>Participates regularly and actively and contributes in ways that help build community</li> <li>Uses specific examples to support response and invite further discussion</li> <li>Contributions are relevant and demonstrate a thorough understanding and reflection regarding the question or concept being presented</li> </ul>
Accomplished (80-90%)	<ul> <li>Participates regularly and actively</li> <li>Uses specific examples to support response</li> <li>Contributions are relevant and demonstrate a thorough understanding regarding the question or concept being presented</li> </ul>
Competent (70-80%)	<ul> <li>Participates regularly but not as active in contributing</li> <li>Communicates ideas, opinions and conclusions clearly and completely</li> <li>Uses specific examples to support response</li> </ul>
Developing (60-70%)	<ul> <li>Does not participate regularly or actively contribute</li> <li>Communicates ideas but fails to provide examples to support response</li> <li>Contribution does not demonstrate an understanding of the question or concept being presented</li> </ul>
Does not participate (<60%)	Indifferent or hinders the discussion

# **Grade Breakdown and Weighting by Category:**

Development Environment Setup	5%
Wireframes 1	10%
Wireframes 2	10%
Design 1	10%
Design 2	10%
Prototype	10%
Coding Exercise 1	5%
Coding Exercise 2	5%
Participation (peer reviews on	15%
prototype & each webpage,	
complete class exercises, ask	
questions)	

Final Project, including written	20%
summary, presentation and peer	
review	
Total	100%

# **Grading Options & Deadlines for Choosing Grading Options (required):**

- CLG—credit letter grade (DEFAULT STUDENT GRADING OPTION)
- P/NP—pass/not pass
- NC—not for credit
- W—withdrawal (must be student-initiated)

GRADE (FOR ROSTER)	PERCENTAGE BREAKDOWN	DESCRIPTION
A+ A A-	93–100% 93–100% 90–92%	Excellent: The grade of "A+", when awarded at the instructor's discretion, represents extraordinary achievement, but does not receive grade point credit beyond that received for the grade of A.
B+ B B-	86–89% 83–85% 80–82%	Good
C+ C C-	76–79% 73–75% 70–72%	Fair: Each course in a certificate program must be completed with a grade of C or better, although some programs have higher requirements.
D+ D D-	66–69% 63–65% 60–62%	Barely passed
F	< 60%	Failed
Р		Passed at a minimum level of C-minus or 70%
NP		Not Passed—anything below a C-minus or below 70%
NC		Not for Credit: Assigned to students who choose not to fulfill credit requirements
W		Withdrawal: Withdrawal from a course without academic penalty. Issued based on a student-initiated withdrawal. See Alternative Grading Options, Incompletes and Withdrawals for more information

# **Petition for Grade Option Change:**

<u>Grading Basis Change Request Form</u> (the link to this form can also be found on the Extension website, under Student Services).

If you opt to change your grade option, you must inform your instructor as follows. The default for all students is to receive a letter grade. If you opt to change your grade option to a pass/no pass basis (P/NP) or a non-credit basis (NC), you must complete and submit the form above before the last class meeting. Extension will not accept any late grade option change form and cannot change a P/NP grade or NC grade option to a letter grade after recording it.

- Passed and Not Passed (P/NP): Passed/Not Passed can only be assigned to students who complete the requirements for credit. The student must have earned at least a "C-" to receive a Passed (P) grade.
- **Not for Credit (NC):** Not for Credit is assigned to students who choose not to fulfill credit requirements.

# **Petition to Withdraw:**

You can submit a request to withdraw by logging into your student account and submitting the request on your enrollment history page before the last course meeting.

Withdrawal after the drop deadlines are non-refundable at the time and a "W" will appear on your student record.

# **Petition for Incomplete:**

Incomplete grades may be assigned by an instructor on an exceptional basis if your coursework has been of passing quality but not finished during the term or enrollment period due to extraordinary circumstances beyond your control. The following criteria must be met:

- You have successfully completed 75 percent of the assignments, assessments or projects before requesting an Incomplete.
- You and the instructor have made a written agreement on the work required to complete the course and the due date by which you will submit the work to the instructor. The due date must be within three months of the course end date. If you do not complete the agreed-upon work, your instructor can submit a failing grade for you.
- You must submit the <u>Petition for "Incomplete" Grade form</u> prior to the course end date (the link to this form can also be found on the Extension website, under Student Services).

However, even if these criteria are met, it is at the discretion of the instructor whether to grant the Incomplete.

It may take your instructor several days to thoughtfully consider your Incomplete request. Communicate with your instructor as soon as you are aware of any circumstances that may prevent you from completing your course, even if you are not yet ready to submit an Incomplete request.

#### **Other Grade Policies:**

http://extension.berkelev.edu/static/studentservices/grades

#### **GENERAL POLICIES**

#### Decorum:

- Please mute your microphone during lecture
- During lectures, if you have a question, please use the chat or raise your hand function on Zoom
- Keep your camera on during class meetings
- Please turn off cell phones
- During lectures, please do not talk unless you have a question or comment relevant to the course material
- During discussions, please listen to others, do not interrupt
- Treat your instructor and classmates with respect

#### **Visitors:**

Auditing is not permitted in UC Berkeley Extension courses. All participants must be enrolled.

Find enrollment deadlines here: <a href="https://extension.berkeley.edu/static/studentservices/registration/">https://extension.berkeley.edu/static/studentservices/registration/</a>

### **Student Disability Services:**

UC Berkeley Extension provides equal access and opportunities to all of our offerings for persons with disabilities and special needs through our Disability Support Services (DSS) office. To ensure access to our courses and programs, DSS facilitates collaboration between Extension students, instructors, academic departments, and the campus community, including the UC Berkeley Disabled Students' Program, which determines the eligibility of accommodations for all UC Berkeley Extension students.

For support or inquiries, please contact DSS at <a href="mailto:extension-dss@berkeley.edu">extension-dss@berkeley.edu</a> or (510) 643-5732 as soon as possible so that we can provide guidance to our resources and so that we can arrange any required support services for you in a timely manner.

# **Academic Integrity and Student Conduct:**

Academic misconduct is any action or attempted action that may result in creating an unfair academic advantage for you or any other members of the academic community. This misconduct includes a wide variety of behaviors such as cheating, plagiarism, altering academic documents or transcripts, gaining access to materials before they are intended to be available, and helping another student to gain an unfair academic advantage.

As a student of UC Berkeley Extension, you are encouraged to reach out to your fellow students in your class to avoid isolation, to discuss materials, and to ask each other questions, but there are limits to this collaboration. Please review the following document on academic integrity (<a href="http://extension.berkeley.edu/upload/academic integrity.pdf">http://extension.berkeley.edu/upload/academic integrity.pdf</a>), which clearly defines what constitutes cheating, as well as plagiarism and other forms of academic misconduct. Students are also responsible

for informing themselves about UC Berkeley Extension's Code of Student Conduct and its grounds for discipline (http://extension.berkeley.edu/upload/studentconduct.pdf).

UC Berkeley Extension takes academic misconduct very seriously. Depending upon the nature of the incident, the academic disciplinary sanction may vary but can result in consequences such as a failing grade for the course or even suspension and dismissal.

#### Reasonable Accommodation for Students' Religious Beliefs, Observations and Practices:

In compliance with Education code, Section 92640(a), it is the official policy of the University of California at Berkeley to permit any student to undergo a test or examination, without penalty, at a time when that activity would not violate the student's religious creed, unless administering the examination at an alternative time would impose an undue hardship which could not reasonably have been avoided. Please contact the Extension program office for more information.

#### Other Extension Policies:

Including Privacy, Nondiscrimination, Sexual Harassment, Safety and Security, Classroom Recording: <a href="http://extension.berkeley.edu/static/studentservices/student-guidelines/">http://extension.berkeley.edu/static/studentservices/student-guidelines/</a>

#### **TECHNOLOGICAL SUPPORT**

- Zoom: All participants are required to sign into a Zoom account prior to joining meetings hosted by UC Berkeley. Students can log in with an existing account or can create a free Zoom Account via the following link: <a href="https://zoom.us/signup">https://zoom.us/signup</a>.
  - For support with Zoom issues, contact the Zoom support line
- Canvas: For support with a Canvas issue, click the Help link at the bottom of Global Navigation menu on the left side of the Canvas screen

## **SCHEDULE**

Below is a tentative schedule of what this class will aim to cover in each session.

Session/ Week	Topics	In Classroom Activities: Demos/Exercises/ Quizzes/Breakout Groups/Critiques/ Presentations/etc	Book Chapters/ Reading/ Videos/Films/ Podcasts/etc	Assignments due
1	Introductions to the course, what you will learn, tools, where to get help etc. Overview of final project, assignments, and course. Wireframing project.	<ul><li>Sign up for GitHub</li><li>Set up project folder</li><li>Start wireframes</li></ul>	Read Chapters: 1, 3, 17	

2	Introduction to the Visual Studio Code Editor. "What is HTML?" An overview of HTML and writing your first HTML file.	<ul> <li>Customizing         Visual Studio         Code</li> <li>Setting up your         project folder</li> <li>HTML tags</li> <li>Block vs         inline-block</li> <li>URLs and links</li> <li>Browser         Developer Tools</li> </ul>	Read Chapters: 2, 4	Identify website project topic Wireframe 1 Home page, 2nd page & 3rd page
3	"HTML Deep Dive." Semantic HTML, accessibility, and designing your project	<ul> <li>Designing your final project</li> <li>Semantic HTML Tags</li> <li>HTML Tables</li> <li>Layouts</li> </ul>	Read Chapter: 6	Development Environment Setup  Wireframe 2 4th page, 5th page & 6th page
4	"What is CSS?" Overview of CSS and how it is utilized	<ul><li>Importing CSS (external CSS)</li><li>Styling HTML</li><li>CSS Box Model</li></ul>	Read Chapters: 5, 8	Design 1 Home page, 2nd page & 3rd page
5	"CSS Deep Dive." Working with Prototyping tools	<ul> <li>Setting up InVision project</li> <li>Using CSS to create responsive elements and layouts</li> <li>Using prototyping tools to create a small interactive project</li> </ul>	Read Chapter: 7	Design 2 4th page, 5th page & 6th page
6	"Advanced CSS." CSS animations, pseudo classes, transitions, and Flexbox. Importing CSS Libraries and custom text. CDNs	<ul> <li>Prototype         Presentations     </li> <li>Introduction to         Font Awesome         Icon Framework     </li> <li>Responsive</li> <li>website</li> <li>development</li> </ul>	Read Chapters: 12, 14	Website project prototype

10	Final Project Presentation			<ul> <li>Present final project</li> <li>Peer review</li> <li>Written summary</li> <li>GitHub Repo</li> <li>GitHub Webpage</li> </ul>
9	Web hosting and FTP & Prepare for Final Project Presentation	Q&A and Help on project coding	http://howto crit.com/	Demonstrate project progression for 5th page and 6th page
8	HTML5 Video & Table Sorting	<ul><li>Advanced CSS Help</li><li>JavaScript Plugins Help</li></ul>	Read Chapter: 18	Demonstrate project progression for 3rd page and 4th page
7	"What is JavaScript?"	HTML 5 Video JavaScript plugins - Lightbox	Read Chapter: 19	Demonstrate project progression for Home page and 2nd page
		<ul><li>Set up final project and GitHub workflow</li></ul>		

# **RIGHTS**

**Civility and Respect in an Atmosphere of Academic Freedom:** 

http://students.berkeley.edu/uga/respect.stm

**UC Berkeley Extension Code of Student Conduct:** 

https://extension.berkeley.edu/upload/studentconduct.pdf

**Course Copyright and Classroom Recording Policies:** 

http://extension.berkeley.edu/static/studentservices/student-guidelines/

# **DISCLAIMERS**

The syllabus and schedule are subject to change.