

Course Name: Web Design with HTML5 and CSS3

Course Number: DESIGN X455 - 009

Number of Units: (2) semester unit in Design

Instructor Name: Steve Fuller

Instructor's email: steve_fuller@berkeley.edu

Day and class meeting time: Wednesday, 6:30 PM – 9:30 PM

Room Number: 510

Semester and Year: Fall 2018

School Address: 160 Spear Street, San Francisco, CA

Phone Number: Please email instructor your questions.

Elective Class: In the Professional Sequence in Graphic Design

Honor Code:

UC Berkeley Extension Honor Code: All members of the UC Berkeley Extension community are expected to act with honesty, integrity, and respect for others. For further information, please refer to:

- Tips for Maintaining My Academic Integrity

(http://extension.berkeley.edu/upload/academic_integrity.pdf)

- UC Berkeley Extension Code of Student Conduct

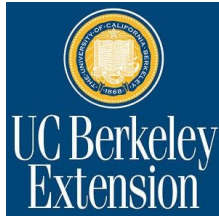
(<http://extension.berkeley.edu/upload/studentconduct.pdf>)

Course Description

This course offers an introduction to HTML5, CSS3, and some exposure to JavaScript/jQuery to create a website. This course will have you applying Web Standards and mastering fundamentals of wireframing, prototyping, development, and deployment and best practices for usability and accessibility will be discussed. This course utilizes open source software but requires students to acquire web hosting and domain name.

Course Objective

The objective of this course is to have students understand the Web design and development process and to build a complete site worthy of a portfolio piece. Students will begin with the research phase, then continue to wireframe, prototype, development, and finally deployment phases. Industry standard tools will be applied to this course including InVision, Atom, GitHub, among others. As well we will progressively build out a final site over 10 weeks that will have students using HTML5 video, CSS transitions/transformations, responsive web design, browser development tools, site deployment, version control of code, and much more.



Student Learning Outcomes

- Understand Document Object Model structure
- Integrate CSS files
- Semantic coding
- Identify HTML accessibility
- Understand and implement JavaScript/jQuery plugins
- Wireframe and Design multi page website
- Prototype interactive website using InVision
- Code web pages to create a website
- Learn about website optimizations and performance
- Understand document structure
- Learn deployment and version control with Git

Intended Audience

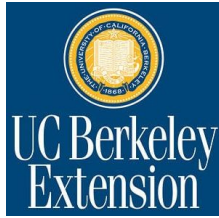
This course is intended for anyone interested in building their own website. The course will be very fast paced and hands on with an emphasis of during further exploration outside of the classroom. The topics and implementation will be vast but taught in a smaller compartmentalized manner so students can feel confident and will be setup for success. The goal is to have a narrow scoped project but open the possibilities of further learning experiences. No prior programming or knowledge required, just a basic understanding of the file system on your computer.

Prerequisites

There are no prerequisites for this course.

Instructional Method

Each class will consist of a lecture, followed by in class exercises on the lecture with weekly assignments that pertain to specific elements of the final project. Students will also be assigned to corresponding chapters in the textbook that will be the basis of each weeks lecture. The course is taught in a PC lab but personal laptops (macOS) are equally welcome in the classroom.



Required Text

HTML5 and CSS3 Visual Quickstart Guide, by Elizabeth Castro and Bruce Hyslop, Peachpit Press: 7th Edition (Copyright ©2012). ISBN-10: 0321719611, ISBN-13: 978-0321719614.

Materials

- Access to a computer and internet access
- Access to web hosting. This will be discussed in class and have Instructor assistance
- A Text editor, Atom will be preinstalled and highly encouraged
- Personal storage either physical or cloud bases

Process for Evaluation

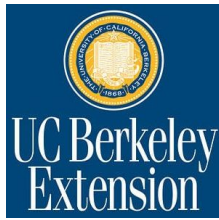
- Assignments: 60%
 - Wireframes
 - Designs
 - Prototype
 - Coding assignments
- Participation: 10%
- Final Project: 30%

Grading

Students will be expected to complete each homework assignment and each assignment should be ready for review the following week at the beginning of class. Assignments are critical to maintaining progress and project completion. Each assignment will be graded on completion and quality. Failure to complete final project, meaning online with hosting provider, will result in automatic failure of the course. Because of the nature of course complexity and content late work will not be accepted.

A

The student's work must reflect outstanding achievement both in quantity and quality. The work pursues concepts, techniques above and beyond the problem. The student must display exceptional attitude in critique participation, response to criticism, and professional conduct. The student's ability to communicate and execute ideas must exhibit outstanding achievement.



B

The student's work must reflect above-average achievement both in quantity and quality. Student pursues ideas and suggestions presented in class and goes to extra effort to resolve required problems. The student must display a positive attitude in critique participation, response to criticism, and professional conduct. The student's ability to communicate and execute ideas must exhibit above-average achievement.

C

The student's work must reflect an acceptable achievement both in quantity and quality, and all work must be completed as assigned. The student must display a positive attitude in critique participation, response to criticism and professional conduct. The student should exhibit an acceptable level of ability in communication and execution of ideas.

D

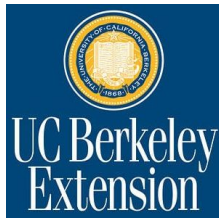
The student's work must reflect an average achievement both in quantity and quality, and partial work must be completed as assigned. The student displays an unsatisfactory attitude in critique participation, response to criticism and professional conduct. The student should exhibit an acceptable level of ability in communication and execution of ideas.

F

The student's work and attitude reflect an unsatisfactory level of achievement both in quantity and quality. The student exhibits an unsatisfactory ability to, communicate and execute ideas and a pattern of low productivity. The student's attendance record may be unacceptable. The student's lack of participation in critiques, poor response to criticism, and inappropriate professional conduct will result in a failing grade.

Final Project:

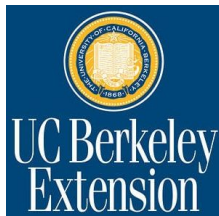
You will need to recreate a band website, however you **should not be doing any asset creation** which means no logos, album covers, pictures, or anything that cannot be easily accessible through a simple Google Image search. The reason for this is **you should be focused on coding not doing Graphic Design.**



Final Project Demo: <https://www.williamsfuller.com/projects/deftones-site/index.html>

Final Project Requirements:

- Homepage
 - Requirements:
 - Full screen image
 - HTML5 video element (optional)
- About
 - Requirements:
 - X2 large paragraphs of text
 - X2 lists
 - Import at least 1 image within a paragraph
- Discography
 - Requirements
 - X3 albums
 - Album cover, title, release date, numbered track, genre, etc.
- Media
 - Requirements
 - X8 thumbnail images
 - Images must have Lightbox effect
 - X3 embedded YouTube videos
- Merch
 - Requirements
 - X6 merch items
 - Must be able to filter items by at least x2 categories
- Tour Dates
 - Requirements
 - Create HTML Table with headers: Venue, Location, Date, Time, and Where to buy tickets
 - Must have link outs to venue and where to buys
 - X10 dates must be present



Class Overview

Class Support: <https://github.com/wsfuller/html5-css3-class>

Week 1:	<p>Introductions: Meet your classmates. Introduce yourself and tell the class a fun fact about yourself.</p> <p>Lecture: Introductions to the course, what you will learn, tools, where to get help etc. Overview of final project, assignments, and course. Wireframing your project.</p> <p>Exercises:</p> <ul style="list-style-type: none">- Sign up for GitHub- Set up design folder- Start wireframes <p>Homework:</p> <ul style="list-style-type: none">- Identify your band/artist- Read Ch. 3 & 6- Wireframe the following pages<ul style="list-style-type: none">- Home- About- Discography
Week 2:	<p>Submit Homework:</p> <ul style="list-style-type: none">- To: steve_fuller@berkeley.edu- Subject: [Your Name] - [Band Name], Week 1 Wireframes <p>Lecture: Introduction to the Atom Code Editor. "What is HTML?" An overview of HTML and writing your first HTML file.</p> <p>Exercises:</p> <ul style="list-style-type: none">- Customizing Atom- Setting up your a project folder- HTML tags- Block vs inline-block- URLs and links- Browser Developer Tools <p>Homework:</p> <ul style="list-style-type: none">- Read Ch. 7 & 8- Wireframe the following pages<ul style="list-style-type: none">- Media- Merch- Tour Dates

Week 3:	<p>Submit Homework:</p> <ul style="list-style-type: none"> - To: steve_fuller@berkeley.edu - Subject: [Your Name] - [Band Name], Week 2 Wireframes <p>Lecture: “HTML Deep Dive.” Semantic HTML, accessibility, and designing your project.</p> <p>Exercises:</p> <ul style="list-style-type: none"> - Designing your final project - Semantic HTML Tags - HTML Tables - Layouts <p>Homework:</p> <ul style="list-style-type: none"> - Read Ch. 10 & 11 - Design the following pages <ul style="list-style-type: none"> - Home - About - Discography
Week 4:	<p>Submit Homework:</p> <ul style="list-style-type: none"> - To: steve_fuller@berkeley.edu - Subject: [Your Name] - [Band Name], Week 3 Designs <p>Lecture: “What is CSS?” Overview of CSS and how it is utilized.</p> <p>Exercises:</p> <ul style="list-style-type: none"> - Importing CSS - Styling HTML - CSS Box Model <p>Homework:</p> <ul style="list-style-type: none"> - Read Ch. 12 & 14 - Design the following pages <ul style="list-style-type: none"> - Media - Merch - Tour Dates
Week 5:	<p>Submit Homework:</p> <ul style="list-style-type: none"> - To: steve_fuller@berkeley.edu - Subject: [Your Name] - [Band Name], Week 4 Designs <p>Lecture: “CSS Deep Dive.” Working with InVision.</p> <p>Exercises:</p> <ul style="list-style-type: none"> - Setting up InVision project - We will be using CSS to create responsive elements and layouts. We will be using InVision to create a small interactive project - Custom fonts - Working with images <p>Homework:</p> <ul style="list-style-type: none"> - Create InVision Prototype - Read Ch 15
Week 6:	<p>Submit Prototype:</p>

	<ul style="list-style-type: none"> - To: steve_fuller@berkeley.edu - Subject: [Your Name] - [Band Name], Week 5 Prototype <p>Optional: Prototype Presentations</p> <p>Lecture: “Advanced CSS.” CSS animations, pseudo classes, transitions, and Flexbox. Importing CSS Libraries (Bulma Introduction) and custom text. CDNs.</p> <p>Exercises:</p> <ul style="list-style-type: none"> - Working with CDNs (Content Delivery Networks) - Introduction to Bulma - Responsive website development - Set up final project and GitHub workflow - 1:1 walk me through prototype for feedback <p>Homework:</p> <ul style="list-style-type: none"> - Read Ch. 17 & 18 - Code the following pages <ul style="list-style-type: none"> - Tour Dates - About
Week 7:	<p>Submit GitHub URLs:</p> <ul style="list-style-type: none"> - To: steve_fuller@berkeley.edu - Subject: [Your Name] - [Band Name], Week 6 GitHub <p>Guest Speaker: Gabriel Flores, Network Engineer “How the Internet works”</p> <p>Lecture: “What is JavaScript?”</p> <p>Exercises:</p> <ul style="list-style-type: none"> - HTML 5 Video - JavaScript plugins <ul style="list-style-type: none"> - Lightbox - Filtering <p>Homework:</p> <ul style="list-style-type: none"> - Read Ch. 19 - Code the following pages <ul style="list-style-type: none"> - Home - Discography
Week 8:	<p>Lecture: Web hosting and FTP</p> <p>Exercises:</p> <ul style="list-style-type: none"> - Advanced CSS Help - JavaScript Plugins Help <p>Homework:</p> <ul style="list-style-type: none"> - Read Ch. 21 - Code the following pages <ul style="list-style-type: none"> - Merch - Media
Week 9:	<p>Lecture: Presentation of final project</p> <p>Exercises:</p> <ul style="list-style-type: none"> - 1:1 open lab help <p>Homework:</p>

	<ul style="list-style-type: none"> - Finalize Deployment - Prepare 5 - 7 minute presentation
Week 10:	Submit Presentation: <ul style="list-style-type: none"> - To: steve_fuller@berkeley.edu - Subject: [Your Name] - [Band Name], Final URL Present Final Projects

Submitting Homework:

You will submit all homework to me via e-mail at steve_fuller@berkeley.edu. Make sure you are using the correct subject line for each assignment that needs turned in.

Subject Line Examples

- Steve Fuller - Deftones, Week 1 Wireframes
- Steve Fuller - Deftones, Week 2 Wireframes
- Steve Fuller - Deftones, Week 3 Designs
- Steve Fuller - Deftones, Week 4 Designs
- Steve Fuller - Deftones, Week 5 Prototype
- Steve Fuller - Deftones, Week 6 GitHub
- Steve Fuller - Deftones, Final URL

Submitting Questions:

Again much like homework I want to have subject lines in a specific entry style

Subject Line Example

- [Your Name], Question: [Subject of Question]
- *Example* - Steve Fuller, Question: Can you help me with Image Optimization

Helpful Resources

Much of the lectures and content for this course will involve utilizing the textbook. It is imperative you keep up with the reading assignments. Aside from the textbook here is a list of some very useful websites

- [CSS-Tricks](https://css-tricks.com/) (https://css-tricks.com/)
- [W3Schools](https://www.w3schools.com/) (https://www.w3schools.com/)
- [Can I use...](https://caniuse.com/) (https://caniuse.com/)
- [Ultimate CSS Gradient Generator](http://www.colorzilla.com/gradient-editor/) (http://www.colorzilla.com/gradient-editor/)
- [MDN Web Docs](https://developer.mozilla.org/en-US/) (https://developer.mozilla.org/en-US/)
- [Flexbox Guide](https://css-tricks.com/snippets/css/a-guide-to-flexbox/) (https://css-tricks.com/snippets/css/a-guide-to-flexbox/)
- [HTML Cheat Sheet](https://digital.com/tools/html-cheatsheet/) (https://digital.com/tools/html-cheatsheet/)

- [CSS3 Cheat Sheet](https://www.onblastblog.com/css3-cheat-sheet/) (https://www.onblastblog.com/css3-cheat-sheet/)
- [Front End Checklist](https://github.com/thedaviddias/Front-End-Checklist) (https://github.com/thedaviddias/Front-End-Checklist)