

Web Design And Coding, Fall 2017

There are two main objectives to this course. The first is learning how to build websites / web applications and the assets that compose them. The second is to understand the concepts behind computers, networks and full stack development.

Lecture Topics

- Computer Principles
- Bash
- HTML
- CSS
- JavaScript / jQuery
- Wireframing
- Responsive Design
- PHP
- MySQL

Class Sessions

Mondays and Wednesdays 6:00pm to 9:00pm

Class starts on Jan 25

Last day of class May 15

Grading

The best result is the knowledge and experience that you will gain during this course, you will also receive a grade based on the following rubric.

Personal Site 25%

Causes Site 35%

Web App 45%

Learning PHP, MySQL, Javascript, CSS and HTML5: A Step-by-step Guide to Creating Dynamic Websites.

ISBN: 9781491949450

Software

- Sublime Text 3 or Brackets
- Git (Mac) or GitBash (Win)
- MAMP (Mac) or XAMPP (Win)
- Google Chrome
- Firefox Mozilla
- Github or Bitbucket Account
- Trello Account
- A Gmail Account with Google Drive
- Draw.io connected to your Google Drive

Date	Topic
1/25	<p>Intro to Web Development</p> <ul style="list-style-type: none"> ● Introductions ● Certifications ● Weekly Schedule ● Expectations <p>Getting Started</p> <ul style="list-style-type: none"> ● Web design, coding and development ● Learning Programming Computer Principles ● The Internet, World Wide Web, Client vs Server, Server Requests, and Web Sites ● Software <p>Crowd Breaker</p> <p>Exercise:</p> <p>Setup Accounts</p> <ul style="list-style-type: none"> ● Gmail ● Slack ● Creative Cloud ● Gmetrix ● Certiport ● Terminal ● Github
1/30	<p>Intro to Design & Coding</p> <ul style="list-style-type: none"> ● How to Boilerplate a site using Brackets ● Keyboard Shortcuts <p>Lesson: BASH</p> <p>Working with the Terminal</p> <ul style="list-style-type: none"> ● Bash Commands ● Boilerplating with Bash
2/1	<p>Lesson: HTML</p> <ul style="list-style-type: none"> ● Creating HTML Pages ● The index Page ● Syntax ● Tags ● Attributes ● Comments ● Text elements ● Links ● Lists ● Tables ● Containers ● Media
2/6	<p>Lesson: HTML</p> <ul style="list-style-type: none"> ● Forms <p>Exercise: HTML</p> <ul style="list-style-type: none"> ● Boilerplate site using BASH and HTML <ul style="list-style-type: none"> ○ Build a 3 page site ○ Each page will have links to other pages, H1 titles, an image and a paragraph

2/8	<p>Lesson: AGILE</p> <p>Agile Methodologies:</p> <ul style="list-style-type: none"> • SCRUM and Sprints <p>Site Diagrams</p> <ul style="list-style-type: none"> • Sitemaps • Wireframing • Mockups <p>Intro to Trello and Draw.io</p> <p>PROJECT 1 SPEC:</p> <ul style="list-style-type: none"> • Build a 2 page personal site • Build in 3 Sprints: <ul style="list-style-type: none"> a. Design Mockups b. Build (HTML and CSS) c. Deploy to GitHub Pages
2/13	<p>Lesson: Repositories</p> <p>Review BASH</p> <p>Bash - GIT</p> <ul style="list-style-type: none"> • Git • GitHub • GitHub Pages <p>Exercise: Deploy previous site on github pages</p>
2/15	<p>Lesson: Repositories</p> <ul style="list-style-type: none"> • Branching • Merging • Cloning and Pulling
2/20	<p>CODE REVIEW</p>
2/22	<p>Lesson: CSS</p> <p>Browser Web Dev Tools</p> <ul style="list-style-type: none"> • Implementation • Syntax • Typography • Color • Background • Box-Sizing • Padding • Margin • Border • Display • Width • Height • Shadows • Overflow
2/27	<p>Lesson 17: CSS</p> <ul style="list-style-type: none"> • Float • Positions

	<ul style="list-style-type: none">• Display Flex• Selectors• Cascading• Media Query
3/1	Lesson: CSS Code Review Exercise: Project 1 Workshop
3/6	PROJECT 1 PRESENTATION
3/8	Lesson: Bootstrap PROJECT 2 SPEC: <ul style="list-style-type: none">• Build a Landing page for a real business• Build in 3 Sprints:<ul style="list-style-type: none">◦ Design Mockups◦ HTML, CSS, and JS (must be Mobile Responsive)◦ Launch on GitHub Pages
3/13	Lesson: JavaScript <ul style="list-style-type: none">• Intro to Javascript• Script Tag• Comments• Console Log• Alerts• Data Types:<ul style="list-style-type: none">◦ Numbers◦ Booleans◦ Strings◦ Arrays• Objects• Comparisons• Logicals• Conditions• Functions• Loops
3/15	Lesson: JavaScript <ul style="list-style-type: none">• DOM and Events Exercise: <ul style="list-style-type: none">• Image Gallery• Conditional Form Handling
3/20	Lesson: JQuery <ul style="list-style-type: none">• Introduction• Installation• Document ready• Selectors• Events• Each• Date• Transversals Exercise: <ul style="list-style-type: none">• Accordion• Image Slider
3/22	Exercise: <ul style="list-style-type: none">• Dynamic HTML from JavaScript Object

	Exercise: Project 2 Workshop
3/27	PROJECT 2 PRESENTATION
3/29	<p>Lesson: Going Full Stack</p> <p>Discussion on Web2.0</p> <p>MAMP:</p> <ul style="list-style-type: none"> • Introduction and Setup to Local Servers <p>PHP</p> <ul style="list-style-type: none"> • Server Processing • PHP Syntax • Error Handling • Web Programming review • Compare and contrast PHP to JS <p>PROJECT 3 SPEC: Build a Web App Build in 5 Sprints:</p> <ul style="list-style-type: none"> • Mockups, Sitemaps, Flowcharts • HTML, CSS, JS and PHP • Must be Mobile Responsive • MVC • Launch
4/3	<p>Lesson: PHP</p> <p>New Methods:</p> <ul style="list-style-type: none"> • Includes • Requires • Constants • Echo • Print_r • Constants • Variable Scoping • Extending Objects • Superglobals • Prepping Form for Processing • Form Processing • Post Variables • Echo User inputs <p>Exercise:</p> <ul style="list-style-type: none"> • Familiarize yourself with MAMP • Build an html page using partials
4/5	<p>Lesson: PHP and SQL</p> <p>PHP</p> <ul style="list-style-type: none"> • Image Handling • Email Generation • Insert Data into SQL Table <p>SQL</p> <ul style="list-style-type: none"> • Databases • Tables • Select from SQL • SQL Statements

	<p>Exercise:</p> <ul style="list-style-type: none"> ● Create a Form with: <ul style="list-style-type: none"> ○ Text ○ Checkbox ○ Radio Buttons ○ Dropdown ○ Text Areas ● Output the user inputs in a page on submit ● Store data from previous html form in json, and mysql
4/10	<p>Lesson: PHP</p> <ul style="list-style-type: none"> ● Sessions ● Session Variables ● Header Redirects ● POST vs GET ● Isset ● Empty ● File_exists ● Login Query ● Session Destroy <p>Exercise:</p> <ul style="list-style-type: none"> ● Create and destroy a session variable
4/12	<p>Lesson: SEO</p> <ul style="list-style-type: none"> ● SEO ● Favicon ● Google Analytics
4/17	Lesson: FileZilla and Remote Environment
4/19	Project 3 Development and Soft Launch
4/24	
4/26	
5/1	
5/3	
5/8	Project 3 Development Review
5/10	Project 3 Workshop and Launch
5/15	<p>Final Presentation: Project 3</p> <ul style="list-style-type: none"> ● 30 Sec: Web app overview ● 1 Min: Feature Details ● 1 Min: Future enhancements ● 3 Min: Feedback