Introduction to Web Development

Welcome to Introduction to Web Development! My name is Armando León, and I am a sophomore at Columbia University. Though my major is history, I am also passionate about all things web development and I hope to teach you the very basics to get you started.

Please note that **a laptop computer is absolutely required** for this class. **If you do not have one, you will not be able to participate in this course**. The laptop computer *must* have the ability to use WiFi, and you must be allowed to download files from the Internet and email files to others. I apologize to those students that cannot get a laptop, but this course (as well as web development) is very hands-on and you need a computer.

Although any browser should work, there are often cross-browser quirks that make it difficult to re-create each look precisely among all modern browsers. As such, I recommend that you use Google Chrome, which you can download at http://google.com/chrome. This will be the browser I use in class.

There is no need to download special software for web development, though you may want to consider an application made specifically for web development or programming. For Windows and Mac, I recommend the Brackets IDE, which you can download at http://brackets.io/. I will use this throughout class, but it is *not required*.

If you do not want to download software, Notepad on Windows or TextEdit on Mac (both come pre-installed) will be fine.

This course is two hours long and I will cover the following information:

- Design
  - Design fundamentals
  - Mobile-first design
  - Basics of color selection
- HTML
  - What is HTML
  - `<!doctype>` declaration
  - `<html>`, `<head>`, `<body>` tags
  - `<title>` and `<meta>` tags
  - `<link>` and `<script>` tags
  - `<nav>`, `<header>`, `<section>` and `<footer>` tags
  - `<h1>`, `<h2>`, etc. tags
  - `<p>`, `<a>`, `<img>` tags
  - `<ol>`, `<ul>` and `<li>` tags
  - `<strong>` and `<em>` tags
  - `id` and `class` attributes
  - Accessibility considerations
  - HTML5 Validation
- CSS
  - What is CSS
  - CSS selectors and specificity
  - Typical declarations and attributes
  - DOM positioning
  - DOM rendering issues
  - Accessibility considerations

- Javascript
    - What is Javascript
    - Variables
    - Control structures, such as `if` and `then`
    - Named functions and anonymous functions
    - Object Prototypes
    - `console.log()`
- jQuery
    - What is jQuery
    - `jQuery()`
    - DOM Manipulation with jQuery
    - Reading Documentation

As you can see, there is a lot of information to cover in a very short amount of time! This course will be hands-on throughout, and I hope to cover these topics in about one hour. The second hour will be dedicated to applying the skills you learned to create a website in groups.

Web development can be stressful, but is very rewarding. I look forward to seeing you all and I hope that you enjoy the class.