



#### Minicamp: Accessible, Responsive Websites with HTML5 and CSS3

#### Course Overview

All modern web pages use a common set of languages to present information in a structured and aesthetic way. In this course, you will build your first web page while incorporating the building blocks of the modern web: HTML5 and CSS3. Using these tools, you will convert a set of digital designs into a static webpage. Using what are known as responsive design techniques, you will ensure this static webpage looks great on a mobile phone, tablet, and desktop computer.

## Learning Objectives

- Build semantically structured, standards compliant HTML5 documents
- Stylize HTML5 documents using an external stylesheet written in CSS3
- Incorporate media queries to adapt styles based on visitor device
- Convert simple, digital designs into static webpages
- Install and configure Google Analytics on a static website
- Deploy a static website to Amazon S3

#### Who Should Attend

This course is designed for adult learners with little to no programming experience. If you are interested in learning web development or general software engineering, this course provides a foundation.

### **Format**

The course will take place on location with a professional instructor present. Over a period of 3 full days, students will attend lectures, read relevant curriculum, and work collaboratively to construct static web pages. The course will run from 9:30 - 4:30 with an approximate lunch break from noon - 1:00PM

# Prerequisites

No prior course material is required. Students should have a basic proficiency with a modern operating system such as Windows 10 or Mac OS X.

## **Technical Requirements**

A laptop running Windows 7 or better, or a laptop running Mac OS X is required. Machines will not be provided.

In advance of the course, students will be provided instructions to install the applications below. All applications listed are free of charge and generally available via Internet download.

- The Atom Text Editor
- Google Chrome
- The Web Developer Toolbar

Students should have a digital, personal headshot to incorporate as part of their webpage design.

Students will require an Amazon Web Services account to deploy their website.

Students will require Facebook and Twitter accounts to incorporate third party widgets as part of their webpages.

### Course Outline

#### Module 1: HTML5 and Web Development Flow

- Hacking Your First Webpage with Chrome Inspector
- What is HTML?
- Getting to Know Your Tools
- Building Your First Webpage: Hello World

### Module 2: HTML Elements and Attributes

- Block Level Elements
- Inline Elements
- Semantic Markup and Information Architecture
- Standards and W3C Validation

#### Module 3: Styling with CSS3

- Styling Text Using Inline Styles
- The Box Model: Padding, Border, and Margin
- Incorporating Color
- CSS Selectors
- The Cascading Nature of CSS3
- External Stylesheets

## Module 4: Positioning and Responsive Design

- CSS Positioning: Relative, Absolute, and Fixed
- Floats and Clear
- Overlap and Z-Index
- Using HTML5 Boilerplate
- Responsive Design and Media Queries
- The Grid and Flexbox
- The Foundation Framework

#### Module 5: Project: Integrate a Static Page Design

- Project Planning
- Decomposing Layout
- Image Formats: GIF, JPEG, PNG, SVG

## Module 6: Deploy Your Site

- Amazon Web Services
- Deploying Your Site to Amazon S3
- DNS
- TCP/IP
- Servers and Ports
- HTTP and SSL

### Module 7: Google Analytics and Third Party Scripts

- Google Analytics
- Google Webmaster Tools
- Embedding Your Twitter Timeline
- Embedding Your Facebook badge
- Embedding a Youtube video

Please email or call with questions: George Hefelle - aspire@tcnj.edu 609-771-2540