

COURSE CURRICULUM

INTRODUCTION to WEB DESIGN & DEVELOPMENT

This 16-week certificate program is established for beginners *without any prior experience in web design or programming*. This course provides instruction in the core skills and technologies of web development and covers the basics of design principles as well as standard web technologies such as HTML, HTML5, CSS, Javascript, JQuery and the Ruby on Rails web application framework. Students will learn to build rich, dynamic websites and database-driven web applications and will receive a **CERTIFICATE OF COMPLETION** upon the successful completion of the program.

COURSE OBJECTIVE

To effectively use the principles and techniques of HTML, HTML5, CSS, Javascript, JQuery and Ruby on Rails and build an interactive website/web application.

This comprehensive introduction to both DESIGN and DEVELOPMENT for the web will consist of in-class discussions and projects. Students should expect to work on industry-standard applications and platform—this course emulates a real-world model of all phases, from design to production.

SOFTWARE APPLICATIONS

LAYOUT AND IMAGE EDITING
Adobe Photoshop

CODING
Sublime Text 2
iTerm2

FTP
Fetch

The standard and preferred system set up for web design work in this class is **Mac OS X**.

DESIGN

BASICS OF DESIGN *for the web*

WHAT IS WEB DESIGN?
Defining “design”
Problem solving
Why things work or don’t work

HTML

WHAT IS HTML?
Page structure
Basic tags
Formatting
Your first web page

WORKING WITH TAGS
Survey of tags used in web design

BEST PRACTICES

THE STUDIO ENVIRONMENT
Files and folders
Versioning
Syntax conventions in the studio

CONTENT

KINDS
Managing text
Image types for the web
Optimization

LINKS
Working with assets
Pages / images / other

COLOR & TYPOGRAPHY

Color for readability and usability

UNDERSTANDING USER INTERFACES

INFORMATION ARCHITECTURE
Readability / usability / context

CODING

CSS

WHAT IS CSS?
When and why to use it
Syntax, selectors and attributes
External - internal - inline
Basic CSS primer

HTML & CSS

CSS box model
Why integration ?
Dos and don’ts

INTERACTIVITY

Working with JAVASCRIPT
Working with JQUERY

RUBY ON RAILS + SINATRA

INTRODUCTION TO SINATRA
Routing, Views, Models

WHAT IS RUBY ON RAILS?
Programmers’ tools
Setting up for RUBY ON RAILS

Programming with Ruby
Creating a simple application

How Rails works (using MVC)
Storing, retrieving and displaying data

APPLICATION MODULES
User sign-in, authentication
Securing pages
Pagination
Photo upload