

Course Overview

Course: Web Scripting 1 (FWDP 1400)

Instructor: Michael Whyte

Course Description:

Modern web sites and applications demand dynamically and constantly updated content and interactive user interfaces. This course introduces the JavaScript programming language as well as foundational programming concepts to provide the services and features that industry demands.

Students will be introduced to general computer programming concepts such as variables, conditional statements, loops, functions, objects, and classes. By applying these basic programming concepts students will explore the development of interactive web experiences such as slide shows, animated navigation systems, tabs, accordions, lightboxes, and other common web widgets.

Manipulating and traversing an HTML document with JavaScript using the browser's DOM API and by utilizing the jQuery library will also be discussed.

Course Outcomes:

Upon successful completion of this course students will be able to:

- Explain what JavaScript is, what the language can do and when to implement it
- Attach scripts to an HTML document
- Explain foundational computer programming concepts such as variables, loops, conditionals, functions, objects, and classes
- Use the DOM API to manipulate and traverse an HTML document
- Implement the jQuery library for efficient JavaScript development
- Create common interactive user interface widgets such as lightboxes and image carousels using modern JavaScript, HTML, and CSS

Course Evaluation:

Assignment 1 – Log in app – 5%

Assignment 2 – Finding Bigfoot – 5%

Assignment 3 – Image Spinner – 5%

Assignment 4 – Shopping Cart – 10%

Assignment 5 – Pet Manager – 15%

Project 1 – Game – 60%

Total: 100%

Course Schedule:**Day 01**

- Course introduction
- Project 1 – JavaScript Game
- Introduction to JavaScript
- JavaScript syntax
- Troubleshooting JavaScript
- Variables
- Window methods
- Introduction to JavaScript events
- Group Assignment 1
- Lab time

Day 02

- Assignment 1 walkthrough
- Progress check-in
- Data types
- Functions
- Group Assignment 2
- Lab time

Day 03

- Assignment 2 walkthrough
- Progress check-in
- Conditionals
- Loops
- Arrays
- Individual Assignment 3
- Lab time

Day 04

- Assignment 3 walkthrough
- Progress check-in
- DOM manipulation and traversal
- Introduction to jQuery
- Group Assignment 4
- Lab time

Day 05

- Lab time

Day 06

- Assignment 04 Walkthrough
- Progress check-in
- Objects
- Classes
- Group Assignment 5
- Lab Time

Day 07

- Lab time

Day 08

- Assignment 05 Walkthrough
- Progress check-in
- Form validation
- Lab time

Day 09

- Progress check-in
- JSON
- Fetch
- Async / Await
- Lab time

Day 10

- Progress check-in
- Creating a matching game
- Game progress check-in

Day 11

- Lab time

Day 12

- Lab time