

WEB 115 Web Markup and Scripting

COURSE DESCRIPTION:

Prerequisites: WEB 110

Corequisites: None

This course introduces Worldwide Web Consortium (W3C) Internet programming using JavaScript. Topics include basic syntax, object-oriented programming, functions, variables, events, arrays, validation, accessibility, and web standards. Upon completion, students should be able to write, debug, maintain well-formed and well documented interactive web content using JavaScript code.

Course Hours per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

LEARNING OUTCOMES:

Upon completing requirements for this course, the student will be able to:

1. Create dynamic web pages using the JavaScript scripting language.
2. Create dynamic web pages using the jQuery library.
3. Develop a website using JavaScript and jQuery.

OUTLINE OF INSTRUCTION:

- I. JavaScript introduction
 - a. Tools
 - b. Logging
- II. Variables
- III. Primitive Data Types
- IV. Arrays
- V. Assignment and Arithmetic Operators
- VI. Global Objects
- VII. Anonymous Functions
- VIII. Comparison Operators
- IX. Decision Making with if/else
- X. Loops using for, break, continue, and do-while keywords
- XI. Introduction to DOM and DOM manipulation
- XII. Event Handling
- XIII. Forms
 - a. Various Input Types
 - b. Validation
- XIV. jQuery
- XV. Error Handling with try/catch keywords
- XVI. Advanced Operators

REQUIRED TEXTBOOK AND MATERIAL:

The textbook and other instructional material will be determined by the instructor.