Course Syllabus Part I
WEB 231 Enterprise JavaScript

3 Credit Hours

Course Description
This course covers the concepts of programming using JavaScript, and introduces JQuery. It focuses on the JavaScript programming language syntax, software design, coding, documenting, and debugging programs. Topics include Data Types, Reference Types, Operators, Objects, JavaScript Events, and Functions. Projects will use HTML, CSS, and JavaScript to create dynamic web pages. GitHub is used to host coding projects.

Course Prerequisites
WEB 200

Course Skills

- Develop high-quality web application software components throughout the full stack.
- Employ efficient web analytics tools and techniques to collect, analyze, and report web usage data.
- Evaluate web application functionality throughout the full stack, using methodologies for test planning and execution, and reporting results to stakeholders.
- Evaluate software maturity and readiness for promotion through the various development environments.
- Create productive and professional relationships among team members and stakeholders to encourage trust, advocate a team atmosphere, build consensus, and facilitate communication.
- Use effective time management and task prioritization techniques to meet obligations to the team and achieve a common purpose.
- Use principles of ethics and leadership to align team actions while balancing individual and group values and priorities.
- Use creative thinking and innovative approaches to solve problems and overcome challenges in a development team.

Course Objectives
Students who successfully complete this course should be able to:

- Identify the architectural design strategies and components that make up the JavaScript programming language.
- Demonstrate the use of variables, array s, operators, functions, control statements, and conditional loops in a JavaScript application.
- Use exception handling to mitigate logical and semantic errors.
- Explain the ways in which industry best practices for code structure, variable and function naming conventions, and error logging improve code readability and application scalability.

- Discuss why version control is necessary for managing work-flows and ensuring code stability.
- Apply industry best practices to create, stage, commit, and push development work to remote repositories (GitHub).
- Review the use of client-side debugging through Web browser development tools (Chrome and Firefox).

Grading Scale

93 – 100% = A	87 – 89% = B+	77 – 79% = C+	67 – 69% = D+
90 – 92% = A-	83 – 86% = B	73 – 76% = C	63 – 66% = D
	80 – 82% = B-	70 – 72% = C-	60 – 62% = D-
			0 – 59% = F

Topic Outline

I. JavaScript Fundamentals
   a. Values and variables
   b. Functions
   c. Control statements
   d. Loops and closures

II. JavaScript Objects
   a. Arrays
   b. Operators
   c. Objects and Built-in Objects
   d. Exception handling

III. Working with the DOM
   a. Finding DOM elements
   b. Manipulating DOM elements
   c. Styling and traversing DOM elements
   d. Client-side debugging through Web browser development tools