

I. COURSE DESCRIPTION:

Students will be writing comprehensive Client-Side web based applications using JavaScript technology. Students will learn JavaScript code that will be cross-browser compatible

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. Introduction to Java Script, Programming, HTML, and JavaScriptPotential Elements of the Performance:

- About the WWW
- What JavaScript is use for
- About Hypertext Markup Language
- How to create an HTML document
- About the JavaScript programming language
- About logic and debugging

2. A First JavaScript ProgramPotential Elements of the Performance:

- About the <Script> tag
- How to create a JavaScript source file
- How to add comments to a JavaScript Program
- How to hide JavaScript from incompatible browsers
- About placing JavaScript in HEAD or BODY section of HTML documents

3. Working with Variables, Functions, and EventsPotential Elements of the Performance:

- How to declare and use variables
- How to define functions
- How to call functions

- How to use JavaScript objects
- How to use object inheritance and prototypes
- How to use object methods
- About variable scope

4. Using Events

Potential Elements of the Performance:

- About events
- About HTML tags and events
- How to use event handlers
- About links
- How to use link events
- How to create an image map

5. Using Data Types and Arrays

Potential Elements of the Performance:

- How to use data types
- About numeric data types
- About Boolean values
- How to use strings
- How to use arrays

6. Expressions and Operators

Potential Elements of the Performance:

- How to use expressions
- How to use arithmetic, assignment, comparison, logical and string operators
- How to create a calculator program

7. Decision Making

Potential Elements of the Performance:

- If statements
- If...else statements
- Switch statements

8. Repetition

Potential Elements of the Performance:

- While statements
- Do...while statements
- For statements
- For...in statements
- With statements
- Continue statements

9. Working with Windows

Potential Elements of the Performance:

- About the JavaScript object model
- About the Window object
- How to open and close windows
- How to work with timeouts and intervals

10. Working with Forms in JavaScript

Potential Elements of the Performance:

- How to use HTML forms
- About the Common Gateway Interface
- How to use the <FORM> tag
- About form elements
- How to create and use input fields
- How create selection lists
- How to create multiline text fields

11. Dynamic Object Model

Potential Elements of the Performance:

- About dynamic HTML
- About the document object model
- About document object properties and methods
- About the image object
- About the animation with the image object

12. State Information and Cookies

Potential Elements of the Performance:

- About state information
- About the string object
- How to create and read cookies

13. Basic Debugging Techniques

Potential Elements of the Performance:

- About debugging concepts
- How to interpret error messages
- How to trace errors

14. Netscape LiveWire

Potential Elements of the Performance:

- About client/server architecture
- About server-side JavaScript development
- How to create LiveWire app's
- How to create a Guest Book using LiveWire

15. Overview of Database and Connecting to Databases with LiveWire

Potential Elements of the Performance:

- How to execute SQL commands with LiveWire
- How to create transaction processing with LiveWire

III. TOPICS:

1. Introduction to Java Script, Programming, HTML, and JavaScript
2. A First JavaScript Program
3. Working with Variables, Functions, and Events
4. Using Events
5. Using Data Types and Arrays

6. Expressions and Operators
7. Decision Making
8. Repetition
9. Working with Windows
10. Working with Forms in JavaScript
11. Dynamic Object Model
12. State Information and Cookies
13. Basic Debugging Techniques
14. Netscape LiveWire
15. Overview of Database and Connecting to Databases with LiveWire

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

JavaScript 2ed., Thompson Learning, by Don Gosselin

V. EVALUATION PROCESS/GRADING SYSTEM:

Quizzes	4 @ 15%
Assignments	4 @ 8%
<u>Part./Present.</u>	<u>8%</u>
	100%

The following semester grades will be assigned to students in postsecondary courses:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 - 100%	4.00
A	80 - 89%	3.75
B	70 - 79%	3.00
C	60 - 69%	2.00
F (Fail)	59% and below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a	

	student additional time to complete the requirements for a course.
NR	Grade not reported to Registrar's office.
W	Student has withdrawn from the course without academic penalty.

VI. SPECIAL NOTES:

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493 so that support services can be arranged for you.

Retention of course outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Rights and Responsibilities*. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course outline amendments:

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

Other Special Notes:

- Students will receive a grade of zero for late assignments unless prior permission is granted from the instructor.
- Students are expected to attend classes on a regular bases and treat their peers and instructors in a business like manner.
- Students are expected to inform the instructor via phone or e-mail if they are unable to attend class.
- Students missing a test will receive a grade of zero unless prior permission is granted from the instructor

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.