



# COURSE OUTLINE

## CSD212

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<b>Course Code: Title</b>	CSD212: WEB SCRIPTING LANGUAGES
<b>Program Number: Name</b>	2090: COMPUTER PROGRAMMER
<b>Department:</b>	COMPUTER STUDIES
<b>Semester/Term:</b>	18W
<b>Course Description:</b>	Students will be writing comprehensive Client-Side web based applications using JavaScript technology. Students will learn JavaScript code that will be cross-browser compatible. The course content will focus on, using JavaScript with well-formed Web pages; work with JavaScript variables and data types and learn how to use the operations that can perform them; add functions, events, and control structures; use the browser object model; ensuring data that is entered into Web forms is correct before sending to the server; use object oriented programming techniques; manipulate data in strings and arrays.
<b>Total Credits:</b>	4
<b>Hours/Week:</b>	4
<b>Total Hours:</b>	0
<b>Prerequisites:</b>	CSD120
<b>This course is a pre-requisite for:</b>	CSD223, CSD320
<b>Course Evaluation:</b>	Passing Grade: 50%, D
<b>Other Course Evaluation &amp; Assessment Requirements:</b>	Quizzes & Tests 60% Assignments 40% 100%  Grade Definition Grade Point Equivalent A+ 90 - 100% 4.00 A 80 - 89% B 70 - 79% 3.00 C 60 - 69% 2.00 D 50 - 59% 1.00 F (Fail)below 50% 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W Student has withdrawn from the course without academic penalty.

#### OTHER EVALUATION CONSIDERATIONS

1. In order to pass this course the student must obtain an overall test/quiz average of 50% or better, as well as, an overall assignment average of 50% or better. A student who is not present to write a particular test/quiz, and does not notify the professor beforehand of their intended absence, may be subject to a zero grade on that test/quiz.
2. There will be no supplemental or make-up quizzes/tests in this course unless there are extenuating circumstances.
3. Assignments must be submitted by the due date according to the specifications of the professor. Late assignments will normally be given a mark of zero. Late assignments will only be marked at the discretion of the professor in cases where there were extenuating circumstances.
4. Any assignment/projects submissions, deemed to be copied, will result in a zero grade being assigned to all students involved in that particular incident.
5. It is the responsibility of the student to ask the professor to clarify any assignment requirements.
6. The professor reserves the right to modify the assessment process to meet any changing needs of the class.

#### Books and Required Resources:

JavaScript The Web Technologies Series by Sasha Vodnik and Don Gosselin  
Edition: 6th  
ISBN: ISBN-13: 978-1-305-07844-4

#### Course Outcomes and Learning Objectives:

### Course Outcome 1.

Introduction to JavaScript

### Learning Objectives 1.

- Describe the differences between client-side and server-side scripting
- Understand the components of a JavaScript statement Add basic JavaScript code to your web pages
  - Structure your JavaScript programs

### Course Outcome 2.

Functions, Data Types and Operators

## Learning Objectives 2.

- Use functions to organize your JavaScript code
- Use expressions and operators
- Identify the order of operator precedence in an expression

## Course Outcome 3.

Building Arrays and Control structures

## Learning Objectives 3.

- Store data in arrays
- Use while statements, do/while statements, and for statements to repeatedly execute code
- Use continue statements to restart looping statements
- Use if statements, if/else statements, and switch statements to make decisions
- Nest one if statement in another

## Course Outcome 4.

Debugging and Error Handling

## Learning Objectives 4.

- Recognize error types
- Trace errors with dialog boxes and the console
- Use comments to locate bugs
- Trace errors with debugging tools
- Write code to respond to exceptions and errors

## Course Outcome 5.

The Document Object Model (DOM) and DHTML

## Learning Objectives 5.

- Access elements by id, tag name, class, name, or selector
- Access element content, CSS properties, and attributes
- Add and remove document nodes
- Create and close new browser tabs and windows with an app
- Use the setTimeout() and setInterval() methods to specify a delay or a duration
- Use the History, Location, Navigation, and Screen objects to manipulate the browser window

## Course Outcome 6.

Enhancing and Validating Forms

## Learning Objectives 6.

- Enhance form usability with JavaScript
- Customize browser-based HTML validation
- Implement custom validation to check for errors and display error messages

## **Course Outcome 7.**

Object Oriented JavaScript

## **Learning Objectives 7.**

- Explain basic concepts related to object-oriented programming
- Use the Date, Number, and Math objects
- Define your own custom JavaScript objects

## **Course Outcome 8.**

Manipulating Data in Strings and Arrays

## **Learning Objectives 8.**

- Manipulate strings with properties and methods of the String object
- Create regular expressions and use them to validate user input
- Manipulate arrays with properties and methods of the Array object
- Convert between strings and arrays, and between strings and JSON

**Date:**

Tuesday, December 12, 2017

Please refer to the course outline addendum on the Learning Management System for further information.