



# Broward Community College

## Course Outline

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STATUS:   A  

COMMON COURSE NUMBER:   COP 2801C  

COURSE TITLE:   JavaScripting  

CREDIT HOURS:           3          

CONTACT HOURS BREAKDOWN:

Lecture/Discussion           32          

Lab                   32          

Other                           

Contact Hours/Week           4          

CATALOG COURSE DESCRIPTION:

This course will teach students to write JavaScript that can be executed on any computer running compatible software. These programs will be created using this Object-Based Scripting Language and designed to interact over the Internet or any other similar network with an appropriate Web Browser. Students will learn JavaScript structure and syntax, how to interact with environment variables, use event handlers, perform form validation, create rollover effects and receive an overview of working with cookies. Students will conceptualize and develop interactive web sites using the full features of JavaScript.

Prerequisite: CGS 1557C

Corequisite: None

UNIT TITLES:

1. Defining and identifying JavaScript.
2. Learning the core structure for JavaScripts.
3. Incorporating JavaScript into HTML.
4. Controlling windows and frames with JavaScript.
5. Using document object models.
6. Using forms and form elements.
7. Using JavaScript to manipulate HTTP cookies and control security.
8. Creating web pages with JavaScript.

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LAST REVIEW   Academic Year 2004-2005   NEXT REVIEW   Academic Year 2009-2010  

*Interim Revision Dates:*

## **I. Course Overview:**

Upon successful completion of this course, the students should be able to create interactive and dynamic web pages with JavaScript.

## **II. Units:**

### **Unit 1. Defining and Identifying JavaScript.**

#### General Outcome:

1.0 The students should be able to define and identify JavaScript.

#### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

1.1 Define and identify JavaScript.

1.2 Search for samples of JavaScript used on the World Wide Web.

1.3 Discuss trends in JavaScript use on the Web.

## Unit 2. Learning the HTML for JavaScript

### General Outcome:

2.0 The students should be able to learn the HTML for JavaScripts.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 2.1 Define the lexical structure of JavaScript.
- 2.2 Define object, properties, methods, and object hierarchy of JavaScript.
- 2.3 Create JavaScripts.
- 2.4 Use JavaScript event handlets.
- 2.5 Create JavaScript functions.
- 2.6 Create JavaScript conditionals.
- 2.7 Create JavaScript variables.
- 2.8 Debug JavaScript code.

### Unit 3. Incorporating JavaScript into HTML.

#### General Outcome:

3.0 The students should be able to incorporate JavaScript into HTML.

#### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 3.1 Create simple appearance changes in HTML with JavaScript.
- 3.2 Create onMouseOver and onClick scripts.
- 3.3 Create improved menus with JavaScript.
- 3.4 Create borders with JavaScript.
- 3.5 Create movements with JavaScript.
- 3.6 Create drag and drop of JavaScript.

## Unit 4. Controlling Windows and Frames with JavaScript

### General Outcome:

4.0 The students should be able to control windows and frames with JavaScript.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 4.1 Create time out scripts.
- 4.2 Create navigator object scripts.
- 4.3 Create screen object scripts.
- 4.4 Use window control methods.
- 4.5 Use location and history objects.
- 4.6 Create multiple windows and frames scripts.
- 4.7 Create warnings, dialog boxes, layers, frames, pop-up menus with JavaScript.

## Unit 5. Using Document Object Models

### General Outcome:

5.0 The students should be able to use document object models.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

5.1 Define document object properties.

5.2 Dynamically generate pages using document objects.

## Unit 6. Using Forms and Form Elements

### General Outcome:

6.0 The students should be able to use forms and form elements.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 6.1 Define form and element objects.
- 6.2 Name forms and form elements.
- 6.3 Define types of forms.
- 6.4 Create control, calculator, shopping cart, data management, multi record and validation forms.
- 6.5 Send results of forms by email.
- 6.6 Change type of forms.

**Unit 7. Using JavaScript to Manipulate HTTP Cookies and Control Security**

General Outcome:

7.0 The students should be able to use JavaScript to manipulate HTTP cookies and control security.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

7.1 Define HTTP cookies.

7.2 Use JavaScript to store, read and name cookies.

7.3 Define security with JavaScript.

7.4 Hide codes with JavaScript.

7.5 Use signing scripts.

## Unit 8. Creating Web Pages with JavaScript

### General Outcome:

8.0 The students should be able to create web pages with JavaScript.

### Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

8.1 Create final projects with JavaScript.

8.2 Debug web pages.

8.3 Upload web pages to server for verification of correct JavaScript.

