



**COURSE OUTLINE : CS/IS 262**  
**D Credit – Degree Applicable**  
**COURSE ID 005298**  
**Cyclical Review: September 2020**

**COURSE DISCIPLINE :** CS/IS  
**COURSE NUMBER :** 262  
**COURSE TITLE (FULL) :** Javascript and jQuery  
**COURSE TITLE (SHORT) :** Javascript and jQuery

**CATALOG DESCRIPTION**

CS/IS 262 is a hands-on course designed to acquaint the student with creating Web scripts and Web scripting libraries. This course focuses on the fundamentals of programming. Students learn to write, debug, and test Web page scripts and functions. Use of JavaScript libraries like jQuery are also included.

Total Lecture Units: 3.00

Total Laboratory Units: 0.00

**Total Course Units: 3.00**

Total Lecture Hours: 54.00

Total Laboratory Hours: 0.00

Total Laboratory Hours To Be Arranged:0.00

**Total Contact Hours: 54.00**

**Total Out-of-Class Hours: 108.00**

Recommended Preparation: CS/IS 260 or equivalent.



**ENTRY STANDARDS**

	Subject	Number	Title	Description	Include
1	CS/IS	260	Introduction To Web Site Development	Use document development techniques such as HTML (HyperText Markup Language) and CSS (Cascading Style Sheets);	Yes

**EXIT STANDARDS**

- 1 Explain and use JavaScript and JQuery;
- 2 create string, date, and numeric manipulation functions;
- 3 use data validation scripts;
- 4 use Document Object Model (DOM) methods to change Web page appearance.

**STUDENT LEARNING OUTCOMES**

- 1 describe string, date, and numeric data and their functions;
- 2 describe Document Object Model (DOM) methods;
- 3 write basic web scripts in support of hypertext web pages;

**COURSE CONTENT WITH INSTRUCTIONAL HOURS**

	Description	Lecture	Lab	Total Hours
1	Course Introduction	3	0	3
2	Introduction to Web Scripting <ul style="list-style-type: none"> <li>• static web pages</li> <li>• dynamic web pages</li> <li>• javascript</li> </ul>	3	0	3
3	Data Types and Operators <ul style="list-style-type: none"> <li>• string, date, numeric</li> <li>• logical operators</li> <li>• relational operators</li> </ul>	4	0	4
4	Functions, Events, and Control Structures <ul style="list-style-type: none"> <li>• how to use functions</li> <li>• how to handle events</li> <li>• use objects to work with data</li> </ul>	4	0	4
5	The Browser Object Model (BOM) <ul style="list-style-type: none"> <li>• Browser specific</li> <li>• No standard</li> </ul>	3	0	3



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6	Scripts and Forms <ul style="list-style-type: none"> <li>• jQuery with forms</li> <li>• data validation</li> </ul>	3	0	3
7	Object-Oriented Scripting <ul style="list-style-type: none"> <li>• objects, methods, and properties</li> <li>• parseInt, parseFloat</li> </ul>	4	0	4
8	Debugging Web Scripts <ul style="list-style-type: none"> <li>• debug with Chrome developer's tools</li> <li>• other debuggins methods</li> </ul>	4	0	4
9	Cookies and Security <ul style="list-style-type: none"> <li>• Issues with cookies</li> <li>• Security solutions</li> </ul>	4	0	4
10	Introduction to the Document Object Model (DOM) <ul style="list-style-type: none"> <li>• Cross-platform and language independent</li> <li>• Logical tree</li> </ul>	4	0	4
11	Dynamic HTML (DHTML) <ul style="list-style-type: none"> <li>• Collection of technologies</li> <li>• No fixed pieces</li> </ul>	4	0	4
12	Active Server Pages in the .Net environment (ASP.NET) <ul style="list-style-type: none"> <li>• Microsoft's first server-side scripting language and engine</li> <li>• Has different objects</li> </ul>	4	0	4
13	Database Connectivity <ul style="list-style-type: none"> <li>• Allows client software to talk to database server software</li> <li>• Establishing a connection</li> </ul>	4	0	4
14	Adapting Open-source scripts <ul style="list-style-type: none"> <li>• Overview of scripts available</li> <li>• Evaluation of scripts</li> </ul>	3	0	3
15	Other Web Scripting Languages <ul style="list-style-type: none"> <li>• VBScript</li> <li>• Jscript</li> <li>• ECMA-262 (European Computer Manufacturers Association)</li> </ul>	3	0	3
				<b>54</b>



**OUT OF CLASS ASSIGNMENTS**

- 1 lab assignments (i.e. input data validation, slide show, accordion);
- 2 programming projects (write original form and data validation script);
- 3 student presentations (i.e. interesting JavaScript code found on the Web)

**METHODS OF EVALUATION**

- 1 quizzes;
- 2 midterm examination;
- 3 final project;
- 4 final examination.

**METHODS OF INSTRUCTION**

- Lecture
- Laboratory
- Studio
- Discussion
- Multimedia
- Tutorial
- Independent Study
- Collaboratory Learning
- Demonstration
- Field Activities (Trips)
- Guest Speakers
- Presentations

**TEXTBOOKS**

Title	Type	Publisher	Edition	Medium	Author	ISBN	Date
Murach's JavaScript and jQuery	Required	Mike Murach & Associates	3		Ruvalcaba, Zak	978-1-943872-05-3	2017