

Minnesota State College Southeast

COMC 2733: JavaScript and Web App Frameworks

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 2

Lab Hours/Week: 2

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course introduces web client programming skills using the JavaScript and XML languages. Topics include common HTML tags, variables, objects, functions, events, data types, operators, control structures (if-else, while, for), forms, data validation, animation, DHTML, the Document Object Model (DOM), CSS, XML schema, XPath, XSL/XSLT. (Prerequisite: COMC2730) (3 Credits: 2 lecture/1 lab)

B. COURSE EFFECTIVE DATES: 03/09/2009 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Create HTML document
2. Use common HTML tags
3. Use common CSS formatting
4. Create skeleton JavaScript program
5. Create JavaScript source file
6. Describe JavaScript variable usage
7. Create function definition code
8. Create function calling code
9. Use function parameters
10. Use function return values
11. Use variable scope concepts
12. Describe JavaScript events
13. Create event handler functions
14. Use standard data types
15. Use escape characters
16. Use arithmetic and assignment operators
17. Use comparison and logical operators
18. Use string operators
19. Use "if-else" statements
20. Use nested "if-else" statements
21. Use "switch" statements
22. Use "while" statements
23. Use "for" statements
24. Use "for . . . in" statements
25. Use "with" statements
26. Use "continue" statement
27. Use array variables
28. Describe document object model (DOM)
29. Use Window object methods/properties
30. Use Frame HTML tags
31. Use Navigator object properties
32. Use Form HTML tags
33. Use text box (Input) HTML tags
34. Use radio button/checkbox (Input) HTML tags
35. Use button (Input) HTML tags
36. Use Select HTML tags
37. # Use JavaScript Form object
38. Use DHTML animation
39. Use Form object methods/properties
40. Use Dynamic HTML animation
41. Use CSS classes
42. Use CSS properties
43. Use XML schema
44. Use XML namespace

45. Load data using XMLHttpRequest
46. Perform XML parsing
47. Use AJAX toolkit
48. Display professional attitude

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

This course was previously titled Web Client Scripting