

COURSE INFORMATION													
Course Prefix/Number:	COP2822	Course Title:	Web Page Design and Programming										
Number of Credits:	4	Clock Hours:											
Course Action	<input type="checkbox"/> Add New Course <input checked="" type="checkbox"/> Modify Existing Course <input type="checkbox"/> Delete Course												
Degree Type	<input type="checkbox"/> B.A.S. <input type="checkbox"/> B.S. <input type="checkbox"/> C.P.P. <input type="checkbox"/> A.A. <input checked="" type="checkbox"/> A.S. <input type="checkbox"/> A.A.S. <input type="checkbox"/> A.T.C. <input type="checkbox"/> C.C.C. <input type="checkbox"/> C.T.C.												
Credit Type	<input type="checkbox"/> 01 (A&P) <input checked="" type="checkbox"/> 02 (PSV/OCCUP) <input type="checkbox"/> 03 (College Prep) <input type="checkbox"/> 05 (PSAV) <input type="checkbox"/> 15 (EPI)												
Course Type	<input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Lecture/Lab Combo <input type="checkbox"/> Internship <input type="checkbox"/> Clinical <input type="checkbox"/> College Prep												
Curriculum Report:	87/ January 2012												
COURSE DESCRIPTION													
<p>This is an intermediate level programming course that prepares students for web development. Students will learn client-side programming skills and technologies, such as JavaScript, XML, and Ajax. Special fee. A.S. credit only. (3 hr. lecture; 2 hr. lab)</p>													
Prerequisite(s):	COP1332 or COP1334, and CTS1800		Co-requisite(s):										
COURSE COMPETENCIES													
Legend:													
<table border="0"> <tr> <td>1. Communication</td> <td>6. Social Responsibility</td> </tr> <tr> <td>2. Numbers / Data</td> <td>7. Ethical Issues</td> </tr> <tr> <td>3. Critical thinking</td> <td>8. Computer / Technology Usage</td> </tr> <tr> <td>4. Information Literacy</td> <td>9. Aesthetic / Creative Activities</td> </tr> <tr> <td>5. Cultural / Global Perspective</td> <td>10. Environmental Responsibility</td> </tr> </table>				1. Communication	6. Social Responsibility	2. Numbers / Data	7. Ethical Issues	3. Critical thinking	8. Computer / Technology Usage	4. Information Literacy	9. Aesthetic / Creative Activities	5. Cultural / Global Perspective	10. Environmental Responsibility
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Course Competency		Learning Outcome											
Competency 1:													
The student will demonstrate knowledge of workplace practices and procedures by:		8. Computer / Technology Usage											
1. Differentiating between client-side and server-side programming													
2. Identifying current markup, scripting, and programming languages and describing their purpose in web site development													
3. Describing the advantages of Web 2.0 technologies and listing example web sites that use these technologies		3. Critical thinking											
4. Explaining the advantages and disadvantages of using different types of Integrated Development Environments to facilitate website development													
Competency 2:													
The student will demonstrate an understanding of JavaScript basics by:													
1. Discussing the origins and uses of JavaScript													
2. Discussing the basic concepts of object-based programming and how they apply to JavaScript													
3. Creating and using primitive data types, operators, variables, and expressions													
4. Demonstrating the use of methods for accessing object properties and functionality													
5. Demonstrating basic screen output and keyboard input													

Competency 3: The student will demonstrate an understanding of JavaScript control statements by:	
1. Creating selection statements using “if”, “if...else”, and “switch”	
2. Creating repetition statements and counters using “for”, “do”, and “while”	
3. Using “break” and “continue” to customize repetition structures	
4. Demonstrating the use of assignment, increment, and decrement operators	
Competency 4: The student will demonstrate an understanding of Functions and Arrays by:	
1. Describing functions and the concept of code reuse	
2. Declaring and calling functions	
3. Returning values from functions	
4. Describing how arrays are stored in Array objects	
5. Declaring, allocating, and sorting arrays	
6. Passing arrays to functions	
Competency 5: The student will demonstrate an understanding of JavaScript Objects, Events, and the Document Object model by:	
1. Discussing the origins and evolution of the Document Object Model(DOM)	
2. Describing and using JavaScript objects such as Math, String, Date, Number, Document, and	
3. Discussing the concepts of “events” and “event handling”	
4. Creating and handling events from HTML elements	
5. Creating and validating form input elements	
6. Creating and handling events based on user mouse activity	
7. Creating and dynamically positioning elements in a web page	
8. Creating and changing the content of an element dynamically	
Competency 6: The student will demonstrate a basic understanding of XML by:	
1. Discussing the origins and uses and XML	
2. Creating a properly structured XML document	
3. Demonstrating proper use of elements and attributes	
4. Declaring and applying namespaces	
5. Discussing Document Type Definitions (DTDs) and Schemas	
6. Discussing Extensible Stylesheet Language Transformations (XSLT)	

Competency 7:	
The student will demonstrate a basic understanding of Ajax by:	
1. Discussing the origins and uses of Ajax	
2. Discussing the XMLHttpRequest Object	
3. Creating a script that will make a request to the	
4. Creating a script that will process the response from a server	
5. Discussing the use of Ajax toolkits in assisting with the development of client-side and server-side Ajax software	