WEB SCRIPTING FOUNDATIONS  
Course Syllabus

<table>
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<tr>
<th>Course Number:</th>
<th>WDES-0004</th>
<th>OHLAP Credit:</th>
<th>Yes</th>
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<tr>
<td>OCAS Code:</td>
<td>8157</td>
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<td>Course Length:</td>
<td>120 Hours</td>
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<td>Career Cluster:</td>
<td>Information Technology</td>
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<td>Career Pathway:</td>
<td>Interactive Media</td>
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<td>Career Major(s):</td>
<td>Web Design</td>
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<td>Pre-requisite(s):</td>
<td>Fundamentals of Web Design or Web Authoring Languages</td>
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<td>Course Description:</td>
<td>Students will develop web-authoring skills through the application of authoring and/or scripting languages as they design security-enhanced solutions.</td>
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Textbooks:

Course Objectives: A. Demonstrate Knowledge of Web Scripting Foundations

1. Select and implement Web technologies, such as XML, JavaScript, Dynamic HTML, Style Sheets, and Scripting Languages.
2. Define Internet communications protocols.
3. Identify security-related issues related to Internet clients in the workplace and configure user customization features in web browsers including: preferences, caching, cookies.
4. Recognize essential database concepts.
5. Identify languages commonly used to provide database connectivity to websites.
6. Create server-side and client-side applications with platform-independent solutions.
7. Use Authoring and/or Scripting Languages to define classes, objects, event handlers, variables, functions, methods, events, strings, expressions, subroutines, and arrays.
8. Manage flow control.
9. Exhibit object-oriented design knowledge and programming techniques.
10. Write dynamic, high-performance web applications.
11. Demonstrate and apply knowledge of web programming and hosting.
12. Differentiate between various versions of Internet programming.
13. Demonstrate knowledge of how to use standard programs to produce an Internet application.
14. Identify authoring programs specifically designed for Internet programming production.
15. Compare/contrast features, strengths, and weaknesses of different authoring programs.
16. Apply knowledge of basic web programming.
17. Demonstrate knowledge of how to interface client/server.
18. Demonstrate knowledge of client-side processing and its...
advantages/disadvantages.
19. Identify security issues related to client-side processing.
20. Identify standard scripting languages (e.g., JavaScript, Visual Basic Script, ActiveX).
21. Demonstrate knowledge of the uses and advantages/disadvantages of various scripting languages.
22. Demonstrate knowledge of how to use a scripting language to program a site.
23. Demonstrate knowledge of how to use advanced communication protocols.
25. Identify hardware requirements and software options for a server.
26. Establish a domain name.
27. Comply with TCP/IP.
28. Apply knowledge of web programming.
29. Demonstrate knowledge of purpose of web content delivery enablers (e.g., CGI, API, SSI).
30. Identify job roles and responsibilities in the IT Industry.
31. Design and apply essential aspects of the cascading style sheets standard for page layouts.
32. Follow the steps involved for testing, optimizing, hosting, and implementation of a website.
33. Troubleshoot, compress, publish, and export animations.
34. Identify steps in the Web site planning development and/or maintenance process.
35. Define electronic commerce (e-commerce) and related technologies and concepts necessary to develop a secure, useful interface (i.e., storefront).
36. Represent technical issues to a non-technical audience.

ODCTE Objectives

Teaching Methods: The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.

Grading Procedures: 1. Students are graded on theory and shop practice and performance.
2. Each course must be passed with seventy (70%) percent or better.
3. Grading scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=50-59%.

Description of Classroom, Laboratories, and Equipment: Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.
### Available Certifications/College Credit

The student may be eligible to take state, national or industry exam after completion of the program. College credit may be issued from Oklahoma State University-Okmulgee or Tulsa Community College. See program counselor for additional information.

| College Credit Eligibility: | The student must maintain a grade point average of 2.0 or better. |