

Course Description:

Web site development using HTML5, approached from a source code perspective. Covers tags, forms, linked objects, CSS3, frames, tables, and introduction to the use of scripting. Students build multi-page Web sites. Prerequisite: CIS 100 and CS 115 or concurrent enrollment with a minimum grade point of 2.5 or equivalent.

This course designed for people who wish to augment and validate their current occupation or acquire new skills to become a Web Developer. The Web certificate will assist graduates in gaining employment in a field that requires them to create and maintain Web pages and sites. Topics and courses are closely aligned with industry standards and techniques. Students learn to develop the effective Web pages and sites through the use of HTML, client-side scripting, server-side scripting, or programming. The courses in this certificate will assist students in achieving the CIW industry certifications.

Course Information:

This syllabus covers the outcomes for the Web Application Developer Certificate for the PACE-IT grant program.

Class Meetings: This is an online course. Classroom time is replaced by content and activities that take place in a managed online classroom (eLearning class). However, the contact hours are flexible and assignments and communication can take place at home or any place with a computer and Internet access. Generally, online classes do not require campus visits (unless stated here). For more information about taking an online class, visit www.edcc.edu/elearning.

Instructor: Marti Baker

Phone: Marti Baker:
EdCC Message number: 425 640 1766 (Better to contact me by email)

Office Location: No Office Hours - Should you have a question, contact Marti Baker at mbaker@email.edcc.edu

Best means of contacting us: Marti Baker:
email: mbaker@email.edcc.edu

Office

Hours: No Office Hours - Should you have a question, contact Marti Baker at mbaker@email.edcc.edu. However, there will be a weekly one hour online question and answer session.

These will be held Friday, 2:00 p.m. PDT

Final Exam Dates: There are two options to demonstrate your competency in this course. You may:

Complete the final project as outlined under assignments OR

Take and pass the CIW Site Development Associate Exam ID: 1D0-61B

Required Course Materials:

Electronic Text Books: You will be instructed at the beginning of each set of modules what your electronic text book will be to complete your studies. These text book is a combination of purchased electronic text and texts provide to you through the Edmonds Community College Library systems. Please read the module required text materials.

Special note: CIW / Certification Partners materials. You will need to purchase electronic text books from the Edmonds Community College Book store / Barnes and Noble.

Site Development Associate ISBN: 0742331334 (CIW Materials to be purchased through EdCC / Barnes and Noble Bookstore)

Hardware / Network You must have a computer, either PC or Mac Operating System with Internet / Web Connectivity

A noise cancelling headset with built-in microphone for Online Question and Answer Sessions

Course competencies: (Course Level Objectives)

- Upon successful completion of this course, students will be able to:
- Perform content and technical analysis on web applications and websites. [REASON]
- Use XHTML to develop, debug, maintain and document web applications and websites. [REASON]
- Implement standardized application / site design. [REASON]
- Compare and contrast different browser’s effects on XHTML documents. [REASON]
- Use the basic principles of Web documents. [REASON]
- Control the appearance of a Web Page through the use of XHTML tables. [REASON]
- Create a website with frames. [REASON]
- Use XHTML forms. [REASON]
- Create XHTML style through inline, embedded and Cascading Style Sheets. [REASON]

| Module Title | Credits | Module Objectives | Competency Demonstration / Assignment |
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| Setting Up Your Development Environment | 1 | <p>understand and work with a three-tired web development environment: development machine, testing server, and production server.</p> <p>install and work with the essential tools / software used by web developers / designers: html editors, css editor, simple graphics editor or creators, and ftp software</p> | <p>HTML Editor Assignment</p> <p>FTP Assignment</p> |
| HTML5 Coding | 1 | <p>Use HTML elements and tags to format paragraphs and text.</p> <p>Add comments to HTML code and</p> | <p>Site Structure Assignment</p> <p>HTML5 Coding</p> |

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| | | <p>document page/site creation.</p> <p>Explain the importance of consistently developing to a single W3C standard.</p> <p>Validate Web page design according to technical and audience standards adopted by employers.</p> <p>Create a Web page using the HTML5 standard.</p> <p>Test and validate Web documents.</p> <p>Determine and create appropriate site folder structure</p> | <p>Assignment</p> |
| <p>CSS and Graphical Elements</p> | | <p>Incorporate graphical images into HTML pages.</p> <p>Distinguish among and identify the uses and benefits of various graphic file formats, including GIF, GIF89a, JPEG, PNG, TIFF, BMP.</p> <p>Add tiled images and colors to Web page backgrounds.</p> <p>Insert horizontal rules into Web pages.</p> <p>Define the browser-safe color palette.</p> <p>Identify ways that color affects the principles of line, value, shape and form in Web pages.</p> <p>Identify and demonstrate the impact of color combinations to</p> | <p>CSS and Graphical Elements Assignment</p> <p>CSS and Graphical Elements Quiz</p> |

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| | | <p>various audiences and cultures.</p> <p>Evaluate Web page design and layout.</p> <p>Explain how to structure Web documents with CSS.</p> <p>Identify ways to apply styles with CSS.</p> <p>Use CSS and HTML5 elements to create document structure.</p> <p>Distinguish between fixed-width and liquid design layouts</p> | |
| Hyperlinks | 1 | <p>Create HTML hyperlinks for text, images, local files and remote sites (internal and external links).</p> <p>Manage existing sites (e.g., remove dead links and/or upgrade connectivity when necessary).</p> <p>Identify the importance of online indexing and cataloging.</p> | <p>Hyperlinks Assignment</p> <p>Hyperlinks Quiz</p> |
| HTML Tables | | <p>Design and format HTML tables to present information in an organized way.</p> | <p>HTML Tables Assignment</p> <p>HTML Tables Quiz</p> |
| Web Forms | 1 | <p>Construct and test HTML forms.</p> <p>Identify ways that CGI scripts can parse and transmit information from a form, including e-mail, FTP, HTTP, HTTPS.</p> | <p>Web Forms Assignment</p> <p>Web Forms Quiz</p> |

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| | | <p>Activate features provided by managed services (e.g., CGI, forms, e-mail, HTTP, HTTPS).</p> | |
| <p>Video, Audio, and Images</p> | | <p>Distinguish among and identify the uses and benefits of various graphic file formats, including GIF, GIF89a, JPEG, PNG, TIFF, BMP.</p> <p>Create and link client-side image maps.</p> <p>Perform advanced image formatting techniques.</p> <p>Distinguish between raster and vector graphics.</p> <p>Scan and edit hard copy sources and images.</p> <p>Identify steps for creating images, including resolution, format and layers.</p> <p>Identify benefits and drawbacks of using stock photography.</p> <p>Create a photo and portfolio management strategy, including online and offline storage, software and services.</p> <p>Evaluate the benefits and drawbacks of proprietary technologies such as Adobe Flash and Microsoft Silverlight.</p> <p>Create a basic video file using video capture and editing software.</p> <p>Insert a video file into a Web page</p> | <p>Video, Audio, and Images Assignment</p> <p>Video, Audio, and Images Quiz</p> |

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| | | <p>using the HTML5 <video> element and attributes.</p> <p>Insert an audio file into a Web page using the HTML5 <audio> element and attributes</p> | |
| Extending HTML | 1 | <p>Define the Document Object Model (DOM) and its relationship to Dynamic HTML (DHTML).</p> <p>Add third-party applications to your Web page (e.g., Google gadgets for the Web).</p> <p>Describe various HTML5 Application Programming Interfaces (APIs), including canvas, geolocation, offline Web application, drag-and-drop.</p> <p>Demonstrate basic HTML5 API functionality using JavaScript and HTML5 elements.</p> <p>Compare popular client-side and server-side programming languages, including JavaScript, Java, PHP, Python, .Net, C, C++, Visual Basic, C#.</p> <p>Define Common Gateway Interface (CGI) methods, including .Net, Django, Python, JavaServer Pages (JSP), Server-Side JavaScript (SSJS), Active Server Pages</p> | <p>Extending HTML Assignment</p> <p>Extending HTML Quiz</p> |

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| | | <p>(ASP), PHP Hypertext Preprocessor (PHP), Ajax.</p> <p>Identify the value of n-tier applications and associated techniques in processing online transactions.</p> <p>Identify ways to use additional technologies to provide custom features to an end user (e.g., using JavaScript to detect Web browser type, using cookies).</p> | |
| <p>GUI Editors & Mobile Web Sites</p> | | <p>Identify ways that a Web browser can become an application delivery platform, including strengths and weaknesses of the browser.</p> <p>Identify the challenges of designing Web sites for mobile devices (e.g., smartphones, tablets, game consoles).</p> <p>Evaluate a GUI HTML editor according to the W3C Authoring Tool Accessibility Guidelines.</p> <p>Validate HTML code.</p> <p>Use font and page appearance options in a GUI HTML editor.</p> <p>View source code and preview Web pages in a browser.</p> <p>Create HTML tables using a GUI HTML editor.</p> <p>Publish (i.e., upload) Web pages</p> | <p>GUI Editors & Mobile Sites Assignment</p> <p>GUI Editors and Mobile Web Sites Quiz</p> |

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| | | <p>and sites to a Web server.</p> <p>Evaluate various types of HTML editors that can edit files in mobile devices and cloud services.</p> <p>Distinguish between mobile apps and mobile Web sites.</p> <p>Identify ways to create pages for traditional and mobile device browsers (e.g., validating code, appropriate resolutions, supported interpreters, extensive user testing).</p> | |
| <p>Web Site Development for Business</p> | | <p>Identify the uses and benefits of various document and multimedia file formats, including PDF, RTF, PostScript, EPS, MOV, MPEG, streaming media, non-streaming media.</p> <p>Define the following Web-related mechanisms for audience development (i.e., attracting and retaining an audience): push technology, pull technology, visitor tracking.</p> <p>Evaluate the benefits and drawbacks of proprietary technologies such as Adobe Flash and Microsoft Silverlight.</p> <p>Estimate download time for Web pages.</p> <p>Document results of Web site functionality testing.</p> | <p>Web Site Development for Business</p> |

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| | | <p>Define e-commerce terms and concepts, including business-to-business (B2B), business-to-consumer (B2C), Electronic Funds Transfer (EFT), merchant systems, relationship management, customer self-service, Internet marketing, 3-D Secure.</p> <p>Identify payment models used in e-commerce, including payment gateways.</p> <p>Identify issues related to working in a global environment, including different currencies, multi-lingual issues, international shipping, legal and regulatory issues.</p> <p>Identify the importance of SSL/TLS to a transaction that contains sensitive information.</p> <p>Identify the importance of online indexing and cataloging.</p> <p>Define search engine optimization (SEO) and related key terms (e.g., Internet marketing, organic vs. non-organic [pay-per-click], Web analytics).</p> | |
| <p>CIS 241 Web Dev 1</p> | | | <p>Competency Demonstration - Final Project</p> <p>OR</p> <p>Competency Demonstration - CIW Site</p> |

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| | | | Development Associate Exam |
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Course Policies and Rules

STATEMENT ON ACADEMIC INTEGRITY

Edmonds CC students shall demonstrate Academic Integrity. I am expected to report all violations of Academic Integrity (cheating and plagiarism) to the College. The College's database of such incidents will be monitored by the Office of the Vice President for Student Services. Data will be maintained for three years. Evidence of repeat incidents will result in additional action by the Office of the Vice President for Student Services as governed by the Student Code of Conduct. In this class, cheating and plagiarism will result in an assignment or grade penalty ranging from partial credit to zero credit for an assignment. A second incident in this class will result in an assignment or grade penalty ranging from zero credit for an assignment to removal from the PACE-IT Web program.

- A definition of academic dishonesty from Wikipedia:

Academic dishonesty or academic misconduct is any type of cheating that occurs in relation to a formal academic exercise. It can include:

 - Plagiarism: The adoption or reproduction of original creations of another author (person, collective, organization, community or other type of author, including anonymous authors) without due acknowledgment.
 - Fabrication: The falsification of data, information, or citations in any formal academic exercise.
 - Deception: Providing false information to an instructor concerning a formal academic exercise—e.g., giving a false excuse for missing a deadline or falsely claiming to have submitted work.
 - Cheating: Any attempt to give or obtain assistance in a formal academic exercise (like an examination) without due acknowledgment.
 - Bribery: or paid services. Giving assignment answers or test answers for money.
 - Sabotage: Acting to prevent others from completing their work. This includes cutting pages out of library books or willfully disrupting the experiments of others.
 - Professorial misconduct: Professorial acts that are academically fraudulent equate to academic fraud and/or grade fraud.
 - Impersonation: assuming a student's identity with intent to provide an advantage for the student.

First Occurrence: Students that committed one of these infractions or is suspected to have committed one of these infractions will have a conversation initially with certificate mentor and if needed the Dean of the Natural Sciences / Math Division of Edmonds Community College.

Second Occurrence: Students that have committed one of these infractions will be removed from the courses.

Services for Students with Disabilities

If you require an accommodation for a disability, please contact Services for Students with Disabilities at 425.640.1320 or ssdmail@edcc.edu.

College Closure/Delayed Opening Notification

You can sign up to receive email or text notifications of college closures or delayed openings due to weather or other emergencies at <http://www.schoolreport.org/>. You can also call the college's switchboard at 425.640.1459

Additional Student Resources:

Useful Student Resources: www.edcc.edu/students

Academic Calendar: www.edcc.edu/calendar/academic.html

Advising: www.edcc.edu/advising

Center for Student Engagement and Leadership: www.edcc.edu/csel

College Policies and Procedures: <http://catalog.edcc.edu>

Counseling and Resource Center: www.edcc.edu/counseling

Diversity Student Center: www.edcc.edu/dsc

eLearning Information: www.edcc.edu/elearning

Enrollment Services: www.edcc.edu/es

Library, including online resources: www.edcc.edu/library

Services for Students with Disabilities: www.edcc.edu/ssd

Student Printing Information: www.edcc.edu/acs/printing

Student Support Resources: www.edcc.edu/support

TRIO: www.edcc.edu/trio

Emergency Preparedness:

The Triton Alert System information is here: www.edcc.edu/alert/triton. This System will be used to send notifications regarding campus closures, emergency situations, or evacuation orders in the event of an emergency or inclement weather. Edmonds CC students and employees are automatically enrolled to receive Triton Alerts through their college email addresses. Sign up to receive text and voice messages on your mobile or

home phones and/or additional email notifications to personal email addresses.

Include your plan for communication in the event of inclement weather or similar event.

Important Dates - Summer Quarter 2014

- July 2 Summer quarter classes begin
- July 4 Independence Day Holiday: College Closed
- July 7 Last day online registration available for adding classes
- July 9 Last day for a 100% refund
- July 9 Last day to drop classes online
- July 15 Graduation application submission deadline
- July 15 Last day before late petition required to register unless otherwise posted in schedule
- July 15 Last day to drop a class without a transcript entry
- July 21 Last day for 50% refund
- Aug. 8 Last day to withdraw, add a continuous enrollment class, or change credit status
- Aug. 18 Web grading available to instructors through instructor briefcase
- Aug. 22 Final exams
- Aug. 22 Last day of summer quarter
- Aug. 27 Grades are due
- Aug. 29 Grades available to students online

Bushway, A., & Nash, W. Academic dishonesty [Web log message]. Retrieved from http://en.wikipedia.org/wiki/Academic_honesty