This course supports the assessments for Web Technologies. The course covers 5 competencies and represents 4 competency units.

**Introduction**

**Overview**

Welcome to Web Technologies! Web development is a fast-growing area of IT that continues to gain importance as e-commerce, social networking, communications, and informational resources develop.

The development process is usually a joint effort of precise coding skills for functionality, combined with creative design efforts to produce the graphic interface users expect on the web. This can be a challenging, yet fun area of IT since it requires both analytical skills (coding) and creative perspectives (graphics, layout, and design).

While new technologies emerge all the time, not all companies adopt newer technologies right away. It is important for professionals to be able to support existing systems as well as build new ones. In fact, xHTML is still used for nearly 45% of the total websites out there even though HTML5 was released in 2014.

The exam itself is current with the course material, so what you are studying in the following sections is what you will be tested upon.

**Competencies**

This course provides guidance to help you demonstrate the following 5 competencies:
Competency 418.1.1: Client/Server Administration
The graduate uses and updates web client software.

Competency 418.1.2: Web Page Creation and Programming Languages
The graduate creates web pages using specified markup and programming languages associated with client server systems.

Competency 418.1.3: Dynamic Web Page Fundamentals
The graduate utilizes the popular tools used for dynamic web page creation.

Competency 418.1.4: E-commerce Infrastructure
The graduate describes the core elements and supporting network infrastructure of an e-commerce design.

Competency 418.1.5: Suspicious Network Activity
The graduate identifies suspicious network activity and selects the appropriate strategy to counter it.

Course Instructor Support

You are encouraged to contact your course instructor team as soon as you begin the course.

Successful students report that working with a course instructor is the key to their success. Course instructors are able to share tips on approaches, tools, and skills that can help you apply the content you are studying. They also provide guidance in assessment preparation strategies and troubleshoot areas of deficiency.

Getting Started

Keys to Success

The greatest challenge of this course is the volume of content. You will need to complete 34 lessons, and each lesson will be tested upon in the final certification exam. To be successful you will need to be diligent in your pacing and take excellent notes to aid in your review at the end of the course material. Follow the activities listed in the course of study for the quickest path to completion.

Suggested Course Pace

Completing one section per week, as presented in the course of study, will keep you in the suggested course completion timeframe. If you wish to complete the course more quickly,
The following information provides details about resources available for you to use as you complete the course.

**Download a Text Editor - Now**

You will need a text editor application to use when completing the labs. We recommend these free text editors:

- **Notepad++** (Windows)
- **TextWrangler** (Mac OS)

**Coursework**

**Suggested Course Pace**

Completing one section per week, as presented in the course of study, will keep you in the suggested course completion timeframe. If you wish to complete the course more quickly, please do!

**Section 1**

In this section you will be introduced to several web development topics as well as HTML coding. Don’t worry if you aren’t familiar with HTML code already. You will learn more about HTML elements in Section 4. In this section you will be learning about web development teams, project management, the site development process, and principles of web page layout.

Access [CIW: Web Design Specialist](#) and complete the following lessons.

Read each lesson and complete the lesson Quizzes:

- **Lesson 1**: Overview of Web Design Concepts
- **Lesson 2**: Web Development Teams
- **Lesson 3**: Web Project Management Fundamentals
- **Lesson 4**: Web Site Development Process
- **Lesson 5**: Web Page Layout and Elements

**Section 2**

In this section you will continue learning about the web development process by studying usability, accessibility, browsers, navigation concepts, web graphics, and multimedia.

Access [CIW: Web Design Specialist](#) and complete the following lessons.

Read each lesson and complete the lesson Quizzes:

- **Lesson 6**: Web Site Usability and Accessibility
- **Lesson 7**: Browsers
- **Lesson 8**: Navigation Concepts
- **Lesson 9**: Web Graphics
- **Lesson 10**: Multimedia and the Web

**Section 3**
In this section you will take a look at ethical issues in web development as well as XHTML, XML, and CSS coding.

Access [CIW: Web Design Specialist](#) and complete the following lessons.

Read each lesson and complete the lesson Quizzes:

- **Lesson 11**: Ethical and Legal Issues in Web Development
- **Lesson 12**: HTML and the Evolution of Markup
- **Lesson 13**: XML and XHTML
- **Lesson 14**: Web Page Structure - Tables and Framesets
- **Lesson 15**: Cascading Style Sheets
- **Lesson 16**: Site Content and Metadata

**Section 4**
In this section you will continue learn about some of the web development applications used today by studying Expression Web and Dreamweaver.

**Special Instructions for Lessons 17 through 22**
Read and take notes on this material, however, keep in mind that the concepts in this lesson are not covered heavily on the exam so the labs are not required.

Access [CIW: Web Design Specialist](#) and complete the following lessons.

Read each lesson and complete the lesson Quizzes:

- **Lesson 17**: Site Development with Microsoft Expression Web 4 - Introduction
- **Lesson 18**: Site Development with Expression Web 4 - Basic Features
- **Lesson 19**: Site Development with Expression Web 4 - Advanced Features
- **Lesson 20**: Site Development with Adobe Dreamweaver CS6 - Introduction
- **Lesson 21**: Site Development with Dreamweaver CS6 - Basic Features
- **Lesson 22**: Site Development with Dreamweaver CS6 - Advanced Features

**Section 5**
In this section you will continue learn about web development applications used today by studying open-source tools, Image Editing, and Flash animations.

**Special Instructions for Lessons 23 and 24**
Read and take notes on this material, however, keep in mind that the concepts in this lesson
are not covered heavily on the exam so the labs are not required. If you would like to complete the labs on your own you will need to use the Live Labs, as downloads of the applications cover are no longer available.

Access CIW: Web Design Specialist and complete the following lessons.

Read each lesson and complete the lesson Quizzes:

- **Lesson 23**: Creating Web Pages Using Open-Source Tools
- **Lesson 24**: Image Editing with Adobe Fireworks CS5
- **Lesson 25**: Multimedia with Adobe Flash Professional CS5

Watch the following video to review the concepts in Lesson 25 readings.

- **Flash Chapter 25**

**Note**: This video shows how to complete the activities in Adobe Flash CS5, while the course material uses Adobe Flash CS6. The concepts are the same, and these concepts are what you may be tested upon.


**Note**: If you would like to download the video, right-click the following link and choose the “Save as...” option: Chapter 25: Flash.

**Section 6**

In this section you will continue learn Flash by studying the timeline, layers, symbols, buttons, tweens, movie clips and ActionScript.

**Special Instructions for Lessons 26 through 29**

Pay close attention to the following lessons, which are part of the "Advanced Web Technologies" domain. This is historically the most challenging area for students on the final exam, and you are encouraged to read and study this section carefully.
Access [CIW: Web Design Specialist](#) and complete the following lessons.

Read each lesson and complete the lesson Quizzes:

- Lesson 26: Multimedia with Flash Professional CS5 — Timeline, Layers, Symbols and Buttons
- Lesson 27: Multimedia with Flash Professional CS5 — Tweens
- Lesson 28: Multimedia with Flash Professional CS5 — Movie Clips
- Lesson 29: Multimedia with Flash Professional CS5 — ActionScript, Masks and Practical Uses

**Watch the following video to review the concepts in Lesson 26 readings.**

- [Flash Chapter 26](#)

**Note:** This video shows how to complete the activities in Adobe Flash CS5, while the course material uses Adobe Flash CS6. The concepts are the same, and these concepts are what you may be tested upon.

Concepts discussed: how to view video, frame types, layers, fla's vs. swf's, how to publish swf, convert to symbols, break apart, how buttons work, actions panel, how to open a webpage within a flash animation, and the library.

*Note: If you would like to download the video, right-click the following link and choose the "Save as..." option: [Chapter 26: Flash](#).*

**Watch the following video to review the concepts in Lesson 27 readings.**

- [Flash Chapter 27](#)

**Note:** This video shows how to complete the activities in Adobe Flash CS5, while the course material uses Adobe Flash CS6. The concepts are the same, and these concepts are what you
Concepts discussed: tweens, motion editor, easing, rotating, alpha property, 3d tool, animate text, and how to stop the animation.

Note: If you would like to download the video, right-click the following link and choose the "Save as..." option: Chapter 27: Flash.

Watch the following video to review the concepts in Lesson 28 readings.

- Flash Chapter 28

Note: This video shows how to complete the activities in Adobe Flash CS5, while the course material uses Adobe Flash CS6. The concepts are the same, and these concepts are what you may be tested upon.

Concepts discussed: onion skins, embed animation in a movie clip, control the animation on the main timeline, control the animation inside the movie clip, and how to add sound.

Note: If you would like to download the video, right-click the following link and choose the "Save as..." option: Chapter 28: Flash.

Watch the following video to review the concepts in Lesson 29 readings.

- Flash Chapter 29

Note: This video shows how to complete the activities in Adobe Flash CS5, while the course material uses Adobe Flash CS6. The concepts are the same, and these concepts are what you may be tested upon.

Concepts discussed: how to create a mask, how to mask an object, how to animate the mask, how to add frames on multiple layers at a time.
Section 7
In this section you will learn about advanced topics of JavaScript, Java Applets, Databases, and processes for web site publication and maintenance.

Special Instructions for Lessons 30 through 34
Pay close attention to the following lessons, which are part of the "Advanced Web Technologies" domain. This is historically the most challenging area for students on the final exam, and you are encouraged to read and study this section carefully.

Access CIW: Web Design Specialist and complete the following lessons.

Read each lesson and complete the lesson Quizzes:

- Lesson 30: JavaScript and DHTML Fundamentals
- Lesson 31: Plug-Ins and Java Applets
- Lesson 32: HTTP Servers and Web Applications
- Lesson 33: Databases
- Lesson 34: Web Site Publishing and Maintenance

Watch the following video to review the concepts in Lesson 30 readings.

Concepts discussed: what is JavaScript, objects, properties, methods, how to embed JavaScript in a webpage, dot notation, alert method, prompt method, concatenation, open method, confirm method, functions, navigator object, the Document Object Model (DOM), DHTML, getElementsByTagName, and event handlers.

Note: If you would like to download the video, right-click the following link and choose the "Save as..." option: Chapter 30: JavaScript.

Section 8
To complete a comprehensive review of all course material, access CIW: Web Design Specialist, and complete Practice Tests A-D in Learn Mode. As you work through each practice test, this
is the recommended approach:

- Take a screenshot of any question that you get wrong and paste into a Word document. This document will be your individualized study guide to help you focus on your specific areas of concern.
- After completing the reviews, use the screenshots to study and master that concept.

**Take the Post Assessment**

After mastering the material covered on both the lesson quizzes and practice tests, access [CIW: Web Design Specialist](#) and complete the Post Assessment in Test Mode. The practice exam is timed and simulates the experience of the certification exam. A consistent score of 85% or higher is a good indicator that you are ready to refer for the final assessment.

**Final Assessment**

*Outside Vendor Assessment*

Complete the CIW Web Design Specialist exam:

- Exam ID: 1D0-520
- Number of Questions: 70 items (randomly chosen)
- Passing Score 49 (or 70%)
- Time Limit: 75 minutes

For directions on how to receive access to outside vendor assessments, see the “[Accessing Objective and Outside Vendor Assessments](#)” page.

*What to Expect on the Exam*

All of the course material will be covered equally on this multiple choice exam. The Web Design Specialist Practice exam should give you a good idea of what to expect. The questions will be mostly theory and scenario-based questions with some coding concepts.

**Multiple Attempts**

If you fail an attempt at the exam, you will be required to contact the course instructor to develop a plan that will prepare you to be successful on the next attempt. After determining you are ready, your course instructor will approve your request to make another exam attempt.
Note: After the second and each subsequent fail, you will be required by CIW to wait at least 30 days before attempting the same exam again. Please see the CIW Exam Policies webpage for more information.

Submitting Outside Vendor Assessment Scores

If you completed your assessment at a testing center, follow the directions for submitting a score report on the “Following outside Vendor Assessments” page.

If you completed your assessment online, follow these directions for submitting a score report.