



Web Design Certification

Why Offer Certification:

Earning certification allows students that are enrolled in an approved course of study in web development/design to show potential employers they possess the knowledge and experience necessary to be successful as an entry level website designer thus greatly improving their employment potential. WD Certified offers web design instructors and teachers the means to provide their students with the opportunity to earn certification upon completion their program of study.

The Exam:

Students must score at least an 80% on 100 randomly selected questions from the following domains to earn a certificate. The HTML, CSS, JavaScript, and PHP domains are based on the standards established by the W3C, World Wide Web Consortium.

Basic Internet History & Computer Knowledge	10%
Web Graphics Concepts	10%
HTML5 & CSS	50%
Client & Server Side Scripting (JavaScript & PHP/MySQL)	25%
Website Administration	5%

Offering the Exam:

The WD Certified exam may only be given at a institution registered with IE Class, Inc., by an approved proctor and upon the students completion of an approved web development/design program of study that meets the following standards:

- The program of study should, in addition to any state program requirements and standards, cover the concepts and topics included on the WD Certified exam.
- It must also include hands-on development projects and/or real-world design experience as part of the required program of study curriculum.
 - The design component must provide students with design guidelines and parameters, yet allow enough latitude for the student to make final site development decisions to accurately demonstrate their site design abilities.
 - The design component must be completed to the satisfaction of the instructor and/or client.

Proctor Requirements:

The exam proctor must be a state certified educator employed at the school offering the exam and have submitted a completed Proctor Guidelines & Non-disclosure Agreement, and be approved by the school's administration to proctor the exam. Registered schools may offer the exam once every 30 days. Students that do not pass the exam the first time may try again during the next testing session established by the proctor.

Exam Fees:

Exam fees start at \$40 for the first 15 students, and \$30 for any additional students.

Note: Schools using the IE Class Web Design Curriculum are not accessed exam fees as the exam is included in the subscription.

Required Knowledge & Testing Concepts:

Examinees should be familiar with the topics and concepts in this document prior to taking the Fundamentals of Web Site Design Certification Exam. The question topics are divided by category. Each question topic may have multiple questions related asked during the exam so it is very important that students are familiar with each topic and concept listed.

Regulatory Entity:

The WD Certified exam is administered by IE Class Inc., a leading provider of high school web design curriculum in the US for more than 10 years. Mailing address PO Box 293902, Lewisville, TX 75029.

Exam Advisory & Review Committee:

Thomas Whitecotton
PHP Developer & Software Architect
VisorCraft L.L.C.
Plano, TX

Kim Perry
Web Developer
Athas Health
Dallas, TX

Clement Yu
Owner / Web Developer
Praxis Consulting Solutions
Dallas TX

Collin Brooks
Web Developer
Fellowship Church
Grapevine, TX

Zad Imam
Owner / Developer
Phylox Solutions
Clearwater, FL

Sheila Burnett
Attorney at Law
ATB Law Firm
Houston, TX

Certification Exam Framework & Standards

Basic Internet History, Computer, & Design Knowledge – 10%

A successful candidate...

<ul style="list-style-type: none">• Knows what input devices are and what purposes they serve.
<ul style="list-style-type: none">• Knows what output devices are and what purposes they serve.
<ul style="list-style-type: none">• Understands what system software is and what purpose it serves.
<ul style="list-style-type: none">• Knows what goes into developing a Quality Assurance Plan.
<ul style="list-style-type: none">• Knows that the Target Audience is.
<ul style="list-style-type: none">• Understands the importance of identifying the Target Audience.
<ul style="list-style-type: none">• Knows the general characteristics of a good web site.
<ul style="list-style-type: none">• Knows who Tim Burners-Lee's is and his contribution to the world.
<ul style="list-style-type: none">• Understands the significance of the Mosaic Web Browser.
<ul style="list-style-type: none">• Knows the significance of the ARPANET and its role in history.
<ul style="list-style-type: none">• Knows the contributions of Charles Babbage's to society.
<ul style="list-style-type: none">• Understands the significance of the ENIAC Computer.
<ul style="list-style-type: none">• Understands the significance of the Analytical Engine.
<ul style="list-style-type: none">• Knows the function of transistors in early computers.
<ul style="list-style-type: none">• Knows the function of vacuum tube use in early computers
<ul style="list-style-type: none">• Knows the function of the integrated circuit in early computers
<ul style="list-style-type: none">• Understands the significance of the Altair 8800 in computer history.

Web Graphics Concepts – 10 Questions

A successful candidate...

<ul style="list-style-type: none">• Understands the various image file formats.
<ul style="list-style-type: none">• Knows the difference between raster and vector images.
<ul style="list-style-type: none">• Demonstrates an understanding of proper use of images on web sites.
<ul style="list-style-type: none">• Understands the importance of cropping images for web site usage.
<ul style="list-style-type: none">• Knows of available graphic editors, both open source and paid.
<ul style="list-style-type: none">• Demonstrates an understanding of how antialiasing used.
<ul style="list-style-type: none">• Knows GIF image type characteristics.
<ul style="list-style-type: none">• Knows PNG image type characteristics.
<ul style="list-style-type: none">• Knows the characteristics of the Jpeg/jpg image type.
<ul style="list-style-type: none">• Knows Tiff image type characteristics.
<ul style="list-style-type: none">• Knows what opacity is.
<ul style="list-style-type: none">• Knows how to apply the rgb() color function in a CSS style rule.
<ul style="list-style-type: none">• Knows how to apply the rgba() color function in a CSS style rule.
<ul style="list-style-type: none">• Knows what causes an image to appear pixilated.
<ul style="list-style-type: none">• Demonstrates an understanding of Image layers.
<ul style="list-style-type: none">• Demonstrates appropriate text spacing and positioning of images.
<ul style="list-style-type: none">• Understands the significance of Web Safe Colors.
<ul style="list-style-type: none">• Demonstrates the ability to use the Hexadecimal (hex) color system on web documents.

HTML 5 & CSS 3 – 50 Questions

A successful candidate...

<ul style="list-style-type: none">• Knows what the doctype declaration is and how to properly apply it.
<ul style="list-style-type: none">• Demonstrates how to use the common HTML5 tags and their associated attributes.
<ul style="list-style-type: none">• Knows how to differentiate between block vs inline elements.
<ul style="list-style-type: none">• Demonstrates how to align text with an element.
<ul style="list-style-type: none">• Knows how to define text and font styles in a style sheet.
<ul style="list-style-type: none">• Demonstrates how to use pseudo-elements.
<ul style="list-style-type: none">• Knows how to create external style sheets.
<ul style="list-style-type: none">• Demonstrates proper use of the padding style property.
<ul style="list-style-type: none">• Demonstrates the ability to properly set margins on elements.
<ul style="list-style-type: none">• Knows how to create and apply classes.
<ul style="list-style-type: none">• Knows how to create and apply IDs.
<ul style="list-style-type: none">• Knows the browser prefixes for Internet Explorer, Chrome, Safari, Firefox, and Opera.
<ul style="list-style-type: none">• Demonstrates the ability to create tables and knows how to appropriately use tables.
<ul style="list-style-type: none">• Knows how to merge table cells across columns and rows.
<ul style="list-style-type: none">• Demonstrates a knowledge and understanding of the CSS text properties.
<ul style="list-style-type: none">• Demonstrates a knowledge and understanding of the CSS border properties.
<ul style="list-style-type: none">• Demonstrates a knowledge and understanding of the CSS position property.
<ul style="list-style-type: none">• Knows how to apply the CSS offset properties such as left, right, top, and bottom.
<ul style="list-style-type: none">• Knows how to use the CSS background properties.
<ul style="list-style-type: none">• Knows how to set a minimum height of an element.
<ul style="list-style-type: none">• Knows how to apply transparent background colors to container elements.
<ul style="list-style-type: none">• Knows how to apply the transform property.
<ul style="list-style-type: none">• Demonstrates an understanding of the float property.
<ul style="list-style-type: none">• Knows how to insert audio into a web page.
<ul style="list-style-type: none">• Knows how to insert video into a web page.
<ul style="list-style-type: none">• Knows which HTML tags have been deprecated.
<ul style="list-style-type: none">• Knows how to make content within an element editable.
<ul style="list-style-type: none">• Demonstrates the ability to convert an inline element into a block element.
<ul style="list-style-type: none">• Knows how to create the common special characters.
<ul style="list-style-type: none">• Demonstrates how to set the color of text using CSS.
<ul style="list-style-type: none">• Knows how to create ordered and unordered lists.
<ul style="list-style-type: none">• Demonstrates how to change the bullet or numbering system in a list.
<ul style="list-style-type: none">• Understands the difference in Sans-serif and Serif fonts.
<ul style="list-style-type: none">• Demonstrates how to appropriately apply the clear property.
<ul style="list-style-type: none">• Knows how to use and apply the transition property.
<ul style="list-style-type: none">• Demonstrates a knowledge and understanding of the font properties.
<ul style="list-style-type: none">• Knows how to apply a poster image to an embedded video.
<ul style="list-style-type: none">• Knows the how to apply style sheets at various levels.
<ul style="list-style-type: none">• Understands how and where each style sheet level should be used.
<ul style="list-style-type: none">• Knows proper web page structure according to HTML5 standards.

Client & Server Side Scripting (JavaScript & PHP/MySQL) – 25 Questions

A successful candidate...

<ul style="list-style-type: none">• Knows how to create HTML forms and the various form fields.
<ul style="list-style-type: none">• Understands the difference in the various form fields and when each should be used.
<ul style="list-style-type: none">• Knows what the method & action attributes do and how to apply them.
<ul style="list-style-type: none">• Understands the differences in an interpreter and compiler.
<ul style="list-style-type: none">• Demonstrates an understanding of client-side scripting languages, specifically JavaScript.
<ul style="list-style-type: none">• Demonstrates an understanding of server-side scripting languages, specifically PHP.
<ul style="list-style-type: none">• Demonstrates how JavaScript variables are used.
<ul style="list-style-type: none">• Demonstrates how PHP variables are created and used.
<ul style="list-style-type: none">• Demonstrates the ability to properly apply event handlers.
<ul style="list-style-type: none">• Knows how to create and use JavaScript functions.
<ul style="list-style-type: none">• Knows how to create and use PHP functions.
<ul style="list-style-type: none">• Demonstrates the ability to concatenate strings.
<ul style="list-style-type: none">• Knows the arithmetic operators and how to apply them in JavaScript & PHP expressions.
<ul style="list-style-type: none">• Demonstrates the ability to properly call JavaScript and PHP functions.
<ul style="list-style-type: none">• Knows how to create and use JavaScript Arrays.
<ul style="list-style-type: none">• Knows how to create and use PHP Arrays.
<ul style="list-style-type: none">• Knows the various control structures used with JavaScript and PHP.
<ul style="list-style-type: none">• Understands how the various control structures work and how to apply them.
<ul style="list-style-type: none">• Demonstrates how to designate required fields in a form.
<ul style="list-style-type: none">• Demonstrates the ability to apply placeholders to form elements.
<ul style="list-style-type: none">• Knows how to use the JavaScript window methods & properties.
<ul style="list-style-type: none">• Demonstrates the ability to use, and an understanding of, algorithms.
<ul style="list-style-type: none">• Demonstrates the ability to use, and an understanding of, pseudo code.
<ul style="list-style-type: none">• Demonstrates the ability to recognize Syntax errors.
<ul style="list-style-type: none">• Demonstrates the ability to recognize logic errors.
<ul style="list-style-type: none">• Demonstrates the ability to output JavaScript content to the screen.
<ul style="list-style-type: none">• Demonstrates the ability to output PHP content to the screen.
<ul style="list-style-type: none">• Knows how to use escape characters
<ul style="list-style-type: none">• Understands how to use shortcut notations (++ , +=, --, *=, etc.)
<ul style="list-style-type: none">• Knows what the PHP isset() function does and understands how to properly use it.
<ul style="list-style-type: none">• Knows what the PHP include() function does and understands how to properly use it.
<ul style="list-style-type: none">• Knows what the PHP include_once() function does and understands how to properly use it.
<ul style="list-style-type: none">• Knows that the PHP require() function does and understands how to properly use it.
<ul style="list-style-type: none">• Knows what the PHP ob_start() function does and understands how to properly use it.
<ul style="list-style-type: none">• Knows what the PHP ob_get_contents() function does and understands how to properly use it.
<ul style="list-style-type: none">• Knows what the PHP str_replace() function does and understands how to properly use it.
<ul style="list-style-type: none">• Knows what the PHP setcookie() function does and how to properly use it.
<ul style="list-style-type: none">• Knows what the PHP PHP mt_rand() function does and how to properly use it.
<ul style="list-style-type: none">• Demonstrates an ability to use comparison to create expressions to be used in control structures.
<ul style="list-style-type: none">• Demonstrates the ability to use logical operators with expressions.
<ul style="list-style-type: none">• Demonstrates ability to solve complex expressions using the comparison and logical operators.

- Demonstrates a knowledge of how to insert rows/records into a MySQL table.
- Demonstrates a knowledge of how to select rows/records from a MySQL table.
- Demonstrates a knowledge of how to delete rows/records from a MySQL table.
- Demonstrates a knowledge of how to update rows/records in a MySQL table.
- Ordering selected records from a MySQL table
- Understands the differences in PHP \$_POST and \$_GET variables and how they are used.
- Understands the significance of the primary key designation in a MySQL table and how to use it.

Website Administration – 5 Questions

A successful candidate...

- Understands legal issues in web design.
- Demonstrates a knowledge of the copyright requirements as they relate to web design.
- Knows what intellectual property theft is.
- Knows what Public Domain is.
- Knows what Phishing is, how to identify it, and how to protect against it.
- Knows the structure and purpose of IP Addresses.
- Understands the purpose of the Domain Name Service and what it does.
- Knows what an Internet Service Provider (ISP) is.
- Knows the purpose of "TCP/IP".
- Demonstrates knowledge of common web server software, such as Apache.
- Knows what HTTP is.
- Knows what FTP is.
- Knows what POP3 is.
- Knows of the common web server operating systems.