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## Alignment to Florida **"Foundations of Web Design"** Course Standards

**Florida Course Details:**

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| **Course Name:** | Foundations of Web Design (2020-2021) |
| **Course Code(s):** | 9001110 |
| **Credit:** | 1 |
| **State Standards Link:** | http://www.fldoe.org/core/fileparse.php/19869/urlt/9001100-2021.rtf |

**CompuScholar Course Details:**

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| **Course Title:** | Web Design |
| **Course ISBN:** | 978-0-9887070-3-0 |
| **Course Year:** | 2019 |

**Note 1**: Citation(s) listed may represent a subset of the instances where objectives are met throughout the course.

**Note 2**: Citation(s) for a "Lesson" refer to the "Lesson Text" elements and associated "Activities" within the course, unless otherwise noted. The "Instructional Video" components are supplements designed to introduce or re-enforce the main lesson concepts, and the Lesson Text contains full details.

## Course Description

This course is designed to provide students with opportunities to acquire and apply foundational skills related to web design.

## Course Standards

| **15 - Demonstrate proficiency setting website project requirements during the design phase and project planning phase of web development. - The student will be able to:** | **CITATION(S)** |
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| 15.01 Define information architecture. | Chapter 13, Lesson 1 |
| 15.02 Discuss the importance of information architecture to web design and development. | Chapter 13, Lesson 1 |
| 15.03 Conduct a client interview to determine the business purpose and needs. | Supplemental Lesson 4 |
| 15.04 Conduct a competitive analysis. | Supplemental Lesson 4 |
| 15.05 Describe the activities performed during the design phase and project planning phase of website development. | Chapter 14, Lessons 1 - 3<br>Supplemental Lesson 4 |
| 15.06 Demonstrate basic design principles (e.g., use of colors, proximity, rule of thirds, white space in the design of a website). | Chapter 6, Lesson 2<br>Chapter 10, Lesson 1<br>Chapter 11, Lesson 1 |
| 15.07 Define the site structure by creating a content map, site map, storyboard, associated wireframes, and web design comp for client approval. | Chapter 13, Lesson 1<br>Chapter 14, Lessons 1 - 2 |

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| 15.08 Analyze and evaluate global site maps. | Chapter 13, Lesson 1<br>Chapter 14, Lessons 1 - 2 |
| 15.09 Discuss the legal and ethical issues (e.g., copyright laws, obtaining permission, public domain, proper citations) related to web design. | Chapter 16, Lesson 1 |
| 15.10 Describe accessibility and its implications on web design. | Chapter 13, Lesson 2 |
| 15.11 Identify the client and target audience needs, as well as the purpose of a website. | Chapter 14<br>Supplemental Lesson 4 |
| 15.12 Describe project management responsibilities. | Supplemental Lesson 4<br>Supplemental Lesson 8 |
| 15.13 Define website project scope and scope creep. | Chapter 14<br>Supplemental Lesson 4 |
| 15.14 Determine deadlines and deliverables for a website project. | Chapter 14<br>Supplemental Lesson 4 |
| 15.15 Discuss Americans with Disabilities Act (ADA) standards for accessibility. | Chapter 13, Lesson 2 |

| **16 - Demonstrate proficiency creating a logical website file structure. - The student will be able to:** | **CITATION(S)** |
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| 16.01 Create an efficient, maintainable directory structure for a website, including the site root and subfolders for assets (e.g., images, templates, CSS). | Chapter 2, Lesson 1<br>Chapter 6, Lesson 5<br>Chapter 25, Lesson 4 |
| 16.02 Demonstrate and use correct file paths for relative, site root relative, and absolute links. | Chapter 5, Lesson 2 |
| 16.03 Apply acceptable and logical website file naming conventions (e.g., index.html, comments.htm, about_us.htm). | Chapter 1, Lesson 3 |
| 16.04 Examine emerging and new markup languages. | Chapter 16, Lesson 3 |
| 16.05 Determine browser or platform compatibility as it relates to webpage design. | Chapter 17, Lesson 1<br>Chapter 20, Lesson 1 |
| 16.06 Identify common DOCTYPES (e.g., Strict, Transitional and Frameset, and HTML5) and describe their appropriate use. | Chapter 2, Lesson 4 |
| 16.07 Understand the purpose and placement of Metadata in a website. | Chapter 3, Lesson 1 |

| **17 - Create basic webpages that meet the industry standards as set forth by the W3C (World Wide Web Consortium). - The student will be able to:** | **CITATION(S)** |
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| 17.01 Create basic webpage structures using common markup elements and attributes. | Throughout the course |
| 17.02 Incorporate list structures in a webpage (e.g., ordered, unordered, definition). | Chapter 4, Lesson 3<br>Chapter 24, Lesson 1 |
| 17.03 Incorporate hyperlinks in a webpage (e.g., external, internal, email, named anchors, id Attribute). | Chapter 5 |

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| 17.04 Describe the influence of the W3C in the web development industry. | Chapter 1, Lesson 1<br>Chapter 13, Lesson 2<br>Chapter 16, Lesson 3<br>Supplemental Lesson 9 |
| 17.05 Write proper webpage syntax using tags and attributes that meet the standards set forth by the W3C. | Throughout the course |
| 17.06 Incorporate common webpage elements and attributes in a webpage (e.g., title, comment tags, id). | Throughout the course |
| 17.07 Differentiate between absolute and relative links used in a webpage. | Chapter 5, Lesson 2 |
| 17.08 Define and incorporate the target attribute for hyperlinks suitable for its purpose. | Chapter 5, Lesson 4 |
| 17.09 Use the HTML AUDIO and VIDEO tags to display a media file on the webpages. | Chapter 19, Lessons 2 - 3 |

| **18 - Incorporate images and graphical formatting on a webpage. - The student will be able to:** | **CITATION(S)** |
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| 18.01 Describe usage guidelines (e.g., format types, size, relevance) for integrating images and graphics onto a webpage. | Chapter 10, Lesson 1<br>Chapter 11, Lesson 1 |
| 18.02 Compare and contrast standard image formats used in webpage design. | Chapter 11, Lesson 1 |
| 18.03 Incorporate graphics into a webpage design. | Chapter 8, Lesson 2<br>Chapter 11, Lessons 1 - 3 |
| 18.04 Create and incorporate image maps in a webpage. | Supplemental Lesson 10 |
| 18.05 Optimize images and graphics for use in a webpage. | Chapter 11, Lesson 1 |

| **19 - Create a basic table structure. - The student will be able to:** | **CITATION(S)** |
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| 19.01 Describe how tables are used in web design. | Chapter 12, Lesson 1 |
| 19.02 Discuss the advantages and disadvantages of incorporating tables in a webpage design. | Chapter 12, Lesson 1 |
| 19.03 Define and modify table structures for the presentation of tabular information. | Chapter 12 |
| 19.04 Create accessible tables using standard table elements and attributes. | Chapter 12, Lesson 3<br>Chapter 14, Lesson 2 |

| **20 - Incorporate form structures in a webpage. - The student will be able to:** | **CITATION(S)** |
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| 20.01 Create an accessible form using common elements, including form, fieldset, legend, textarea, select, option, button, labels, and input (radio, checkbox, submit, reset, image, password, hidden). | Supplemental Lesson 11 |
| 20.02 Describe and diagram the relationship between HTML forms and server-side technologies. | Supplemental Lesson 11 |

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| 20.03 Compare and contrast the GET and POST methods for forms handling. | Supplemental Lesson 11 |
| 20.04 Define form validation and describe how it is accomplished. | Supplemental Lesson 11 |
| 20.05 List popular server-side technologies often used to process content sent from HTML forms. | Supplemental Lesson 11 |
| 20.06 Connect a HTML form to a server-side script for processing. | Supplemental Lesson 11 |

| **21 - Discuss appropriate use of frame structures and their outdated usage. - The student will be able to:** | **CITATION(S)** |
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| 21.01 Discuss using frames and iframe structures and the related security vulnerabilities. | Supplemental Lesson 12 |
| 21.02 Describe appropriate uses of iframes. | Supplemental Lesson 12 |

| **22 - Understand the basic principles of Cascading Style Sheets CSS. - The student will be able to:** | **CITATION(S)** |
|---|---|
| 22.01 Define the purpose of CSS and describe its importance in web design. | Chapter 6, Lesson 1 |
| 22.02 Discuss existing and emerging CSS versions. | Chapter 6, Lesson 1<br>Chapter 20, Lesson 1 |
| 22.03 Explain how inheritance and specificity affect CSS rule conflicts. | Chapter 6, Lesson 4 |
| 22.04 Discuss the different placement of CSS (e.g., inline, external, embedded). | Chapter 6, Lessons 1, 3, 5 |

| **23 - Use CSS to create basic webpages based on industry standards. – The student will be able to:** | **CITATION(S)** |
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| 23.01 Recognize and use element selectors, ID selectors, class selectors, pseudo-class selectors, and descendant selectors. | Chapter 6, Lesson 1<br>Chapter 7, Lesson 3<br>Chapters 22 and 23 |
| 23.02 Explain how inheritance and specificity affect CSS rule conflicts. | Chapter 6, Lesson 4 |
| 23.03 Use inline, internal and external style sheets. | Chapter 6, Lessons 1, 3, 5 |
| 23.04 Use the link and import methods to connect to an external style sheet. | Chapter 6, Lesson 5 |
| 23.05 Apply basic CSS properties (background, border, color, float, font, height, line-height, list-style, margin, overflow, padding, text-align, text-indent, width, padding). | All listed CSS properties are covered across many lessons |
| 23.06 Use CSS to style tables (e.g., borders, width, spacing, alignment, background). | Chapter 12, Lesson 2 |
| 23.07 Use CSS to enhance the appearance and usability of an HTML form. | Supplemental Lesson 11 |

| 24 - Develop website page layout using AP (Absolute Positioning) elements. - The student will be able to: | CITATION(S) |
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| 24.01 Compare and contrast positioning types on a webpage. | Chapter 9, Lessons 1 - 2 |
| 24.02 Describe the usage of AP elements in a webpage. | Chapter 9, Lessons 1 - 2 |
| 24.03 Incorporate AP elements in a webpage layout using appropriate Div tags. | Chapter 9, Lessons 1 - 2 |
| 24.04 Discuss the benefits and drawbacks of using AP elements for webpage layouts. | Chapter 9, Lessons 1 - 2 |
| 24.05 Determine how the stacking order and z-index impact webpages created with AP elements. | Chapter 9, Lesson 3 |

| 25 - Examine web design technologies and techniques. - The student will be able to: | CITATION(S) |
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| 25.01 Discuss client-side and server-side technologies. | Chapter 13, Lesson 3 |
| 25.02 Define e-commerce types and usage. | Chapter 13, Lesson 4 |
| 25.03 Describe database connectivity relative to websites. | Chapter 13, Lesson 3 |

| 26 - Describe the process for publishing a website. - The student will be able to: | CITATION(S) |
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| 26.01 Explore domain name selection process. | Supplemental Lesson 2 |
| 26.02 Identify process to registering a domain name. | Supplemental Lesson 2 |
| 26.03 Compare and contrast hosting providers, features, and selection criteria. | Supplemental Lesson 1 |
| 26.04 Describe the various means for uploading website files (e.g., FTP, web-based tools). | Chapter 15, Lesson 5 |

| 27 - Describe how website performance is monitored and analyzed. - The student will be able to: | CITATION(S) |
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| 27.01 Identify issues related to website maintenance. | Supplemental Lesson 4 |
| 27.02 Use webpage validation tools. | Supplemental Lesson 9 |
| 27.03 Describe website performance metrics (e.g., visits, time-on-page, time-on-site) and discuss their design implications. | Supplemental Lesson 9 |
| 27.04 Demonstrate knowledge of accessibility problems and solutions. | Chapter 13, Lesson 2 |
| 27.05 Discuss current basic Search Engine Optimization techniques. | Chapter 13, Lesson 4 |

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| 27.06 Explore common website analytic tools. | Supplemental Lesson 9 |

| **28 - Create an informational website that conforms to industry standards as set forth by the W3C. - The student will be able to:** | **CITATION(S)** |
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| 28.01 Use GUI (Graphical User Interface) web authoring software to create a multi-page informational website. | Chapter 16, Lesson 5 |
| 28.02 Use image-editing software to enhance website designs with simple graphics. | Chapter 11, Lesson 1<br>Chapter 14, Lessons 1 - 2 |
| 28.03 Use animation software to enhance website designs. | Chapter 27, Lesson 3 |
| 28.04 Enhance the website using client-side technologies (navigation bars, rollover images or text, check plug-ins). | Chapter 24, Lessons 1 - 3<br>Chapter 25, Lessons 1 - 2<br>Chapters 26 and 27 |

| **29 - Demonstrate efficient, consistent website development practice (use of templates, snippets). - The student will be able to:** | **CITATION(S)** |
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| 29.01 Produce website designs that would work equally well on various operating systems and platforms, browser versions/configurations, and devices. | Chapter 20, Lesson 1 |
| 29.02 Describe various file formats that can be imported onto a website (tabular data, word processing, presentation, PDFs). | Chapter 11, Lesson 1<br>Chapter 19, Lessons 1, 3<br>Supplemental Lesson 5 |

| **30 - Demonstrate language arts knowledge and skills. - The student will be able to:** | **CITATION(S)** |
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| 30.01 Locate, comprehend and evaluate key elements of oral and written information. | Chapter 13, Lesson 2<br>Chapter 14, Lesson 3<br>Chapter 16, Lessons 1, 3 |
| 30.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. | Supplemental Lesson 4<br>Supplemental Lesson 7 |
| 30.03 Present information formally and informally for specific purposes and audiences. | Chapter 14<br>Supplemental Lesson 4 |

| **31 - Demonstrate mathematics knowledge and skills. - The student will be able to:** | **CITATION(S)** |
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| 31.01 Demonstrate knowledge of arithmetic operations. | Chapter 10, Lesson 1 |
| 31.02 Analyze and apply data and measurements to solve problems and interpret documents. | Chapter 10, Lesson 1<br>Supplemental Lesson 1<br>Supplemental Lesson 9 |
| 31.03 Construct charts/tables/graphs using functions and data. | Chapter 12 |