

Key Learning: Developing an understanding of the vast influence and impact the World Wide Web places on society and our daily lives.

Unit Essential Question:  
How does the Internet work?

Concept:  
A brief history about the Internet and what organizations "run" the internet.

Concept:  
Transferring information and the basic languages and protocols of the web

Concept:  
Current internet trends and how the web has changed the world

- Lesson Essential Questions:
- Who created the Internet?
  - How old is the Internet?
  - Who "runs" the Internet?
  - What information would you use to support the need for organizations to oversee the overall structure of the Internet?

- Lesson Essential Questions:
- How are computers, cables and other hardware used to transfer information on the Internet?
  - Why are web protocols in place?
  - What is the purpose of the domain name system?
  - Based on what you know, how would you explain HTML, XML, and PHP?

- Lesson Essential Questions:
- How has the Internet affected print media?
  - How would you justify the use of social media in the classroom?
  - How do you use the Internet in your daily life?

Vocabulary:  
File Transfer Protocol (FTP), Internet Service Provider (ISP), search engine, IANA, ICANN, IGF, W3C

Vocabulary:  
host, server, Internet Protocols (IPs), Domain Name System (DNS), extensions (.com, .org), URL, HTML, XML, PHP, ASP, database, Flash, Network

Vocabulary:  
Mobile Internet, Multimedia, Online Media, Social Networks, WiFi

Standards:  
PDE: Business, Computer and Information Technology 15.4.12.B, D,  
ISTE NETS\*S: Curriculum and Content Area Standards – NETS for Students 1.d, 2.a, 2.d, 3.b, 3.d, 4.a, 5.a, 5.b, 5.c, 6.d  
National Business Education Standards  
Communication: I, IV, Information Technology: I, XVII

Key Learning: Web design uses all the same elements as print design. Students will need to explore the space and layout, handle fonts and colors, and put it all together in a format that gets the message across to the intended audience.

Unit Essential Question:

What way would you design a website to meet the needs of its intended audience?

Concept:  
Elements of Good Design

Concept:  
Fonts and Typography

Concept:  
How to Use Color

Lesson Essential Questions:

- What are the principles of design?
- How do good designs lead the eye through the design in a deliberate fashion so that the viewer sees what the designer wants?

Lesson Essential Questions:

- How is writing for the web different than writing in print?
- How would you improve a Web page's appearance through the use of fonts?
- Why are em(s) or percentages a better choice to use on Web pages?

Lesson Essential Questions:

- How would you determine what color scheme to use for your website?
- What can you do to synchronize your web colors?
- Is a browser safe color palette really required?

Vocabulary:  
Lines and Linework, Shape, Texture, Color, Direction, Principles of Design, Balance, Contrast, Emphasis, Rhythm, Unity, Alignment, Repetition, Consistency, Contrast, White Space

Vocabulary:  
font, font family, serif, sans serif, script, monospace, fantasy, font stack, font-family style property, font size, font colors, leading, tracking, kerning, line-height, letter-spacing property, background-color, font-weight, font-style, font-variant, relative font measures (px, em, %, ex)

Vocabulary:  
hexidecimal codes, color symbolism, trends, color wheel, color theory, monochromatic, analogous, complementary, triadic

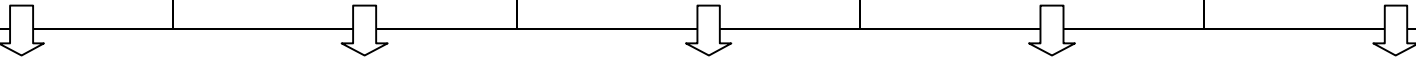
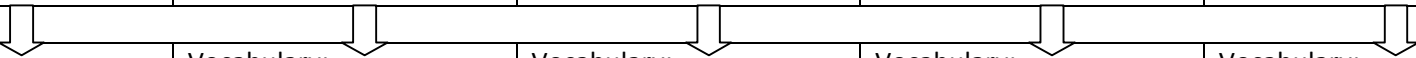
Standards:  
PDE: Business, Computer and Information Technology  
Computer and Information Technologies - 15.4.12.A, D, G,  
ISTE NETS\*S: Curriculum and Content Area Standards – NETS for Students

1.a, 1.b, 1.c, 2.a, 2.b, 2.c, 3.a, 3.b, 3.c, 4.a, 4.b, 5.b, 6.c, 6.d  
National Business Education Standards  
Information Technology - IV, V, VI, VII, XVI

Student Learning Map

Web Design Basics

Web Design I

<p><u>Concept:</u> Graphics and Images</p>	<p><u>Concept:</u> Web Layout Basics</p>	<p><u>Concept:</u> Web Navigation</p>	<p><u>Concept:</u> Accessibility and Usability</p>	<p><u>Concept:</u> Web Design Software</p>
				
<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• What could be done to maximize the loading speed of your pages?</li> <li>• How could you modify or enhance an image create a visual focal point for your Web page?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• What is the difference between padding and margins?</li> <li>• Why should designers use white space?</li> <li>• How does a designer determine the type of layout he/she should use?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• Why is good navigation critical?</li> <li>• How do you determine what should be included in your navigation?</li> <li>• What do you think is important to place on a "Contact Us" page?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• What could be done to maximize the accessibility of your Web page?</li> <li>• How can you make sure your Web page is following the recommended guidelines?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• How should you evaluate web design software?</li> </ul>
				
<p><u>Vocabulary:</u> IMG (tag), GIF, PNG, JPG, No Right-Click Script, Shrink Wrapping Images, Watermarking, Photoshop</p>	<p><u>Vocabulary:</u> headlines, navigation, images, textual content, points of interest, white space, empty space, negative space, breathing room, text width, scan length, padding, margins, fixed width layouts, liquid layouts, lorem ipsum, place</p>	<p><u>Vocabulary:</u> information architecture, organization, 404, search</p>	<p><u>Vocabulary:</u> accessibility, usability, visually impaired, hearing impaired, physically impaired, color blind, design patterns, heuristics, W3C, accessibility validator, alt txt</p>	<p><u>Vocabulary:</u> HTML Editors, Adobe Dreamweaver, Online Editors, WYSIWYG HTML Editors, Text HTML Editors, Free HTML Editors</p>

	holder text, layout designs, layout templates, fold (above the fold)			
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Key Learning: Students will learn and understand how CSS is used to create consistency and allow for easy site-wide changes. The emphasis is on employing their understanding of design principles to inform the modifications and customizations they make to the widget's Cascading Style Sheet.

Unit Essential Question:

What are the advantages to using CSS within web site designing?

<p><u>Concept:</u> How to analyze a widget</p>	<p><u>Concept:</u> How to analyze websites</p>	<p><u>Concept:</u> Wireframes, design comps, and customizing a widget</p>
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<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• What is the purpose of the widget?</li> <li>• What is its functionality?</li> <li>• Who is the audience?</li> <li>• Who created the widget?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• How does the graphic design (balance, emphasis, color, tone, visual hierarchy, and so on) communicate the content?</li> <li>• If there are images on the page, do they add value to the content, or are they for decoration and appeal? If they add value, describe how.</li> <li>• How well does the layout of text help viewers understand the main points of the site content?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• What font and color will you use for titles or headings of your widget?</li> <li>• What font and color will you use for descriptions of your widget?</li> <li>• How will your navigation bar and text navigation help visitors know where they are?</li> <li>• How can a wireframe aid in the design process?</li> </ul>
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<p><u>Vocabulary:</u> widget, accordions, tabbed panels, buttons, dialog boxes, pop-up windows, selection boxes, toggle switches, slide shows</p>	<p><u>Vocabulary:</u> Class, tag, ID, purpose, audience, design, visual layout, consistency structures, color scheme, visual hierarchy elements, content, bias, currency, source, ability to corroborate information</p>	<p><u>Vocabulary:</u> Phases of Web Project (Define, Structure, Design, Build and Test, Launch), design comp, wireframe</p>
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Standards:  
PDE: Business, Computer and Information Technology  
Computer and Information Technologies - 15.4.12.A, D, G, K

ISTE NETS\*S: Curriculum and Content Area Standards – NETS for Students

1.a, 1.b, 2.a, 3.b, 4.b, 5.a, 6.a, 6.b

National Business Education Standards

Information Technology - IV, V, VI, VII, VIII, X, XI, XVI, XVII

<p><u>Concept:</u> Selecting and preparing images</p> <p style="text-align: center;">↓</p>	<p><u>Concept:</u> Editing and customizing CSS rules</p> <p style="text-align: center;">↓</p>	<p><u>Concept:</u> Adding a customized widget to a web page</p> <p style="text-align: center;">↓</p>	<p><u>Concept:</u></p> <p style="text-align: center;">↓</p>	<p><u>Concept:</u></p> <p style="text-align: center;">↓</p>
<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• How can you produce non-destructive editing of images?</li> <li>• Compare and contrast how picture resolution on a computer screen is different than print resolution.</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• How do you change a CSS rule when editing a widget in Dreamweaver?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• How do you save and publish a customized widget to your web page?</li> </ul>	<p><u>Lesson Essential Questions:</u></p>	<p><u>Lesson Essential Questions:</u></p>
<p><u>Vocabulary:</u> copyright, CS6 tools, cropping, straightening, resizing, adjusting color, retouching, resolution, pixels</p>	<p><u>Vocabulary:</u> Dreamweaver Interface Elements, Views (Design, Code, Split, Live), Widget Browser, CSS Styles</p>	<p><u>Vocabulary:</u> SPRY folders, Preview in Browser, remote server</p>	<p><u>Vocabulary:</u></p>	<p><u>Vocabulary:</u></p>



**Key Learning:** Students will work on a team and design for someone else, emphasizing the following: the design-team process for website development, team-client interaction for incorporating feedback and changes throughout the development of the site, and team-client communication using the design document and evaluating websites in preparation for the design.

**Unit Essential Question:**

How does the use of design principles, website design analysis and good communication skills help a designer to create a website for a client?

<b>Concept:</b> Website analysis	<b>Concept:</b> Define a web project	<b>Concept:</b> Structure a web project
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<p><b>Lesson Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• How do you analyze websites for purpose, audience, usability, and accessibility?</li> <li>• What categories of information do you find in the websites?</li> </ul>	<p><b>Lesson Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• What are the goals, target audience, content, and delivery requirements for the design project?</li> <li>• Suppose you could choose your own design team. What would you look for to create a team destined for success?</li> </ul>	<p><b>Lesson Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• What design elements would make your websites consistent?</li> <li>• Why are wireframes an important part of the web design process?</li> <li>• How would you decide what to present to a client?</li> </ul>
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<p><b>Vocabulary:</b> Navigation systems, Integrated user interface, Animated screen elements, Rich media advertising, Social media, usability standards</p>	<p><b>Vocabulary:</b> Class, tag, ID, purpose, audience, design, visual layout, consistency structures, color scheme, visual hierarchy elements, content, bias, currency, source, ability to corroborate information</p>	<p><b>Vocabulary:</b> information architecture, flowchart, project overview, goals, objectives, messages, audience, delivery requirements, site content, site structure, visual design,</p>
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<p><u>Concept:</u> Design a web project</p>	<p><u>Concept:</u></p>	<p><u>Concept:</u></p>	<p><u>Concept:</u></p>	<p><u>Concept:</u></p>
<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• How can you produce non-destructive editing of images?</li> <li>• How do your two design comps address the client's goals, audience, and content requirements?</li> <li>• What is the typical use of a storyboard in the design process?</li> </ul>	<p><u>Lesson Essential Questions:</u></p>	<p><u>Lesson Essential Questions:</u></p>	<p><u>Lesson Essential Questions:</u></p>	<p><u>Lesson Essential Questions:</u></p>
<p><u>Vocabulary:</u> wireframe, storyboard, client feedback, prototype, revision</p>	<p><u>Vocabulary:</u></p>	<p><u>Vocabulary:</u></p>	<p><u>Vocabulary:</u></p>	<p><u>Vocabulary:</u></p>

Key Learning: Students will learn the design-team process for website development and deployment. Student teams will build and launch the client website, completing the full website production process.

Unit Essential Question:

How does the use of design principles, website design analysis and good communication skills help a designer to create a website for a client?

<p><u>Concept:</u> Web development best practices</p>	<p><u>Concept:</u> Implementing a reusable design</p>	<p><u>Concept:</u> Building a website</p>
<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• What is the best practice for file organization when designing a website?</li> <li>• How do you use the CSS Styles panel to create and edit CSS rules?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• What are the benefits of reusable design?</li> <li>• How do web standards such as CSS help make designs reusable and enable quick global changes?</li> <li>• How can such things as code snippets, templates, CSS Starter Layouts, and other elements be reused?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• What are the best practices for adding video, audio and other rich media elements to a web page?</li> <li>• What is the difference between flash video and HTML5?</li> </ul>
<p><u>Vocabulary:</u> best practices, HTML1, HTML4, HTML5, Fluid Grid Layouts, file management, file organization, div, CSS</p>	<p><u>Vocabulary:</u> benefits of reusable design, templates, assets, libraries, assets panel, library objects, web-optimized file type and size</p>	<p><u>Vocabulary:</u> internal and embedded style sheets, external style sheets, template, text, images, rich media, links, types of links (absolute, site-root-relative, and document-relative), link targets (_blank, _self, _parent, and _top), data tables, flash, HTML5, forms, image maps</p>

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 Information Technology - IV, V, VI, VII, VIII, X, XI, XVI

<p><u>Concept:</u> Designing for multiple screens</p>	<p><u>Concept:</u> Testing a website</p>	<p><u>Concept:</u> Publishing a website</p>	<p><u>Concept:</u> Presenting and launching a website</p>	<p><u>Concept:</u></p>
<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• What are various devices for viewing web content?</li> <li>• How do you make design decisions based on the viewing screens?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• What steps would you take to guarantee quality?</li> <li>• When watching site visitors, how will you know when they like what they see on your site?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• What steps do you need to take to publish your website?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• What are the primary components of a website that search engines crawl to find relevant search results?</li> </ul>	<p><u>Lesson Essential Questions:</u></p>
<p><u>Vocabulary:</u> screen size, fluid grid layouts, CSS Media Queries</p>	<p><u>Vocabulary:</u> quality assurance, test plan, usability testing, usability observation, design review</p>	<p><u>Vocabulary:</u> remote server, testing server, internal development server, live publication</p>	<p><u>Vocabulary:</u> launching and marketing a site, Search Engine Optimization (SEO), key terms, meta tags, head content</p>	<p><u>Vocabulary:</u></p>

Key Learning: Students will learn with the Internet, portfolios can be electronic, easily and quickly sharing a designer’s work with anyone in the world. Portfolios communicate accomplishments, works in progress, or personal history and showcase a person's work when applying for a job.

Unit Essential Question:

How do web portfolios affect society, business and communication?

<p><u>Concept:</u> Designing a Portfolio</p>	<p><u>Concept:</u> Constructing a Portfolio</p>	<p><u>Concept:</u> Review and Redesign of Portfolio</p>
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<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• What are the goals and uses of portfolios?</li> <li>• How do you use portfolios to communicate ideas?</li> <li>• What are long term and short term goals of portfolios?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• Why is it important to optimize images for online publication?</li> <li>• Why would you provide contact or a feedback form in your portfolio?</li> </ul>	<p><u>Lesson Essential Questions:</u></p> <ul style="list-style-type: none"> <li>• Why are technical tests and peer reviews a critical step in the design process?</li> <li>• When someone reads your portfolio, what do you want them to think?</li> </ul>
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<p><u>Vocabulary:</u> web portfolio, skill set, training, projects, career interests, professional goals, accomplishments, learning plan, web photo gallery, writing for the web</p>	<p><u>Vocabulary:</u> design principles, page design principles, reusable design, document properties, CSS layouts</p>	<p><u>Vocabulary:</u> design, content, peer review</p>
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