NEW MILFORD PUBLIC SCHOOLS
New Milford, Connecticut

Introduction to Web Design

July 2015

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District Mission Statement:

"The mission of the New Milford Public Schools, a collaborative partnership of students, educators, family and community, is to prepare each and every student to compete and excel in an ever-changing world, embrace challenges with vigor, respect and appreciate the worth of every human being, and contribute to society by providing effective instruction and dynamic curriculum, offering a wide range of valuable experiences, and inspiring students to pursue their dreams and aspirations."

Introduction to Web Design

This elective course will introduce students to the basics of website creation through writing and interpreting the mark-up language HTML5 and the styling language CSS3 enabling students to create and maintain websites. Students will construct websites that include text, graphics, audio, and video while using appropriate presentation elements. Projects will be completed to practice skills regarding appropriate use of code, design, use of color, structure and styling of a webpage. Students will use and learn about text editors, WYSIWYG HTML editors and web-based Integrated Development Environments such as c9.io.

Pacing Guide

Unit #	Title	Weeks	Pages.
1	Precoding & Website Planning Text editors vs WYSIWYG Editors Sketches, Diagrams, & Storyboards Files and Folders Colors (contrasting and complementing) Commenting	1-2 Weeks	7-9
2	Introduction to HTML & Basic Elements File extensions Angle Brackets & Tags Essential Elements Attributes & Values Nesting	2-3 Weeks	10-13
3	HTML & Site Content Block vs Inline elements Inserting text Tables & Page Organization Hyperlinks & Lists Images - Web Graphics & Copyright Division Elements HTML5 – Audio & Video	5-6 Weeks	14-17
4	Introduction to CSS Inline vs Internal & External Syntax: Properties & Values	1-2 Weeks	18-20
5	CSS & Styling Elements Types of Selectors CSS Box Model Page Layout Position & Float	3-4 Weeks	21-23
6	Completing and Presenting Project & Portfolio Self and Peer Assessments	2-3 Weeks	24-26

Key For Common Core State Standards

W = Writing Standards

WHST = Writing: History/S.S., Science, & Technical Subjects

RST = Reading Standards for Literacy, Science, and Technology Subjects

SL = Speaking and Listening Standards

RI = Reading Standards for Informational Text

RH = Reading: History/Social Studies

New Milford Public Schools

Committee Member(s): Daryl Daniels Unit 1: Pre-coding & Website Planning	Course/Subject: Introduction to Web Design - Practical Arts Grade Level: 9-12 # of Weeks: 1-2

Identify Desired Results

Common Core Standards

- WHST.9-10.6 – Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.
- W.11-12.6: Use technology, including the Internet to produce, publish, and update individual or shared writing products in response to ongoing feedback including new arguments or information.
- W.11-12.10: Write routinely over extended time frames (times for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences
- SL.11-12.1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- RST.11-12.4: Determine the meaning of symbols, key terms, and other domain specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.

Enduring Understandings Generalizations of desired understanding via essential questions (Students will understand that ...)	**Essential Questions** Inquiry used to explore generalizations
• HTML5 is the standard mark-up language used insert the content of a webpage. • CSS3 is the styling language used to format webpages. • WYSIWYG HTML editors and Text editors can be used to create websites. • Identification of a websites target audience is critical for the development of an effective website.	• What kind of coding is used to create a website? • Can software be used to create a website? • What is the process necessary to create a professional appearing, usable website? • What is and how can one identify the target audience?

Expected Performances
What students should know and be able to do

Students will know the following:

- HTML5 and CSS3 are used for when creating a website.
- HTML provides the content to a page while CSS provides the style or format.
- The process of creating a websites involves several steps beginning with a solid understanding of the reason for the website and its necessary content.
- A root folder is used to contain all the folders & files used in a website.
- Color is used to provide a theme and highlight important content.
- Commenting in both an HTML and CSS file is very important and why.

Students will be able to do the following:

- Differentiate between the use of HTML and CSS code.
- Create a root folder and properly organize the folders and files within the root folder.
- Properly comment within HTML and CSS code and communicate the why the process is important to a professionally developed website.
- Create a sketch of a webpage using necessary values.

Character Attributes

- Integrity
- Cooperation
- Courage

Technology Competencies

- Manage files and folders
- Identify and apply appropriate design concepts and create web pages
- Identify client and target audience needs
- Identify basic network connectivity concepts
- Students use technology tools to enhance learning, increase productivity and promote creativity
- Students practice responsible use of technology systems, information and software
- Students create original works as a means of personal or group expression.
- Students apply existing knowledge to generate new ideas, products, and processes

Develop Teaching and Learning Plan

Teaching Strategies:	Learning Activities:
• Teacher opens discussion regarding elements necessary for a professional appearing website. • Teacher models the creation of a root folder and explains why all files must be nested within. • Teacher identifies and models with the use of the smartboard, necessary components of a properly completed web page sketch. • Teacher opens discussion and provides instruction of the use of	• Students will research and identify what they believe to be important to in a website. • Students will create a sketch of a webpage using specific criteria. • Students will identify complementing and contrasting colors using a web based color wheel. • Students will collaborate and produce rational for the use of commenting when creating a website. • Students will produce a root folder with appropriate nested elements including

commenting within code and reasons for its importance. • Teacher introduces GUI of basic text editor's vs WYSIWYG HTML editors. • Teacher facilitates a discussion with the use of viable resources about complimenting and contrasting colors and why color is important to a website. • Teacher will demonstrate and facilitate creating and sharing google docs.	a homepage saved as an HTML file. • Students will share in groups: Important attributes of a website, popular HTML editors, and popular web based HTML editors. • Students will create and share Google docs (notes/journal). • Students begin culminating project by choosing and researching their topic • Students create a beginning sketch of their culminating project home page.

Assessments

Performance Task(s) Authentic application to evaluate student achievement of desired results designed according to GRASPS (one per marking period)	**Other Evidence** Application that is functional in a classroom context to evaluate student achievement of desired results
	• Students will produce a sketch and provide evidence to their ability to comment in HTML and CSS code • Students will demonstrate an ability to open a text editor insert HTML and CSS commenting and save files with .html, .css, and graphic file extensions to appropriate folders • Students will complete formative assessments until they reach 80% proficiency • Students will demonstrate knowledge of technology terms presented • Observation of student participation in groups and class discussions • Student responses in journal entries • Reflective writing

Suggested Resources

- Duckett, Jon. HTML & CSS: Design and Build Websites. Indianapolis, IN: Wiley, 2011. Print.
- "HTML Color Picker." ColorPicker.com. N.p., n.d. Web. 09 July 2015.
- "HTML." W3Schools Online Web Tutorials. N.p., n.d. Web. 09 July 2015.
- "Learn to Design and Develop Websites." Web Development Tutorials. N.p., n.d. Web. 09 July 2015.
- "W3C." World Wide Web Consortium (). N.p., n.d. Web. 09 July 2015.
- "Web Design & Development I." Web Design & Development I. N.p., n.d. Web. 09 July 2015.

Committee Member(s):	Course/Subject:

Daryl Daniels Unit 2: Introduction to HTML & Basic Elements	Introduction to Web Design - Practical Arts Grade Level: 9-12 # of Weeks: 2-3

Identify Desired Result-s

Common Core Standards

- RST.9-10.3 – Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in a text.
- W.11-12.6: Use technology, including the Internet to produce, publish, and update individual or shared writing products in response to ongoing feedback including new arguments or information.
- W.11-12.10: Write routinely over extended time frames (times for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences
- SL.11-12.1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- RST.11-12.4: Determine the meaning of symbols, key terms, and other domain specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.

Enduring Understandings Generalizations of desired understanding via essential questions (Students will understand that ...)	**Essential Questions** Inquiry used to explore generalizations
• File extensions are necessary and indicate the type of software necessary to use the file. • The essential elements for a webpage are "html", "head", and "body". • Data found in the "body" element will be visible to users while data found in the "head" element will not. • Nesting elements is essential and means that elements are found within other elements. • Most elements have a start and end tag while some have only a start tag and they are considered "empty elements". • Attributes add additional information to elements. • Every attribute has a corresponding value.	• What websites are good for learning how to create websites? • What does HTML mean and what part of a website is it responsible for? • What are the parts of HTML code and how do they work together? • What is a file extension and what types of files will we be using in our websites? • What HTML elements are necessary and how can we determine the version of HTML being used?

Expected Performances
What students should know and be able to do

Students will know the following:

- The DOCTYPE informs the web browser which version of HTML is being used and the DOCTYPE for HTML5 is "!DOCTYPE html".
- HTML code is made up of elements which contain start tags (angle brackets, element names, attributes and values), content, and end tags.
- An element may include nested elements.
- The "title" element is nested in the "head" element and provides text in the browsers tab.
- A web browser is used to view webpages.

Students will be able to do the following:

- Demonstrate an ability to create a webpage with an appropriate DOCTYPE and the three essential elements.
- Create, save, and open a website through a basic web editor.
- Provide the "body" element with an attribute and value that will add information to the data element.
- Insert content to a webpage using elements that text.

Character Attributes

- Integrity
- Perseverance
- Cooperation

Technology Competencies

- Manage files and folders
- Evaluate and select the appropriate applications to productively complete tasks
- Identify and apply appropriate design concepts and create web pages
- Identify basic network connectivity concepts
- Students evaluate the accuracy and quality of their online work
- Students use technology tools to enhance learning, increase productivity and promote creativity
- Students practice responsible use of technology systems, information and software
- Develop a mastery of technology tools required to enhance academic, business and personal performance for success
- Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources
- Students create original works as a means of personal or group expression.
- Students apply existing knowledge to generate new ideas, products, and processes
- Students demonstrate a sound understanding of technology concepts, systems, and operations

Develop Teaching and Learning Plan

Teaching Strategies:	Learning Activities:
• Teacher demonstrates and discusses the necessary elements in an html file. • Teacher will present the several	• Students insert the appropriate DOCTYPE, essential elements, "title" and text elements into a file, save the file as HTML and open in a browser

different file extensions in which text editors are able to save. • Teacher demonstrates different techniques to open an HTML file into a web browser. • Teacher provides graphics demonstrating the correct syntax for HTML code through his/her website. • Teacher poses questions through his/her website for students to discuss and respond to in their journals. • Teacher models the creation of an HTML template. • Teacher will lead discussions (question & answers) regarding previously covered material.	using a text editor. • Students define and apply the parts of an element in HTML. • Students create and save an HTML template featuring an appropriate DOCTYPE, the three essential elements, and the "title" element to be used for future HTML files. • Students interpret and discuss questions in small groups. • Students recreate graphics representing HTML syntax. • Students watch or read tutorials and respond to questions. • Students create questions about completed tutorials. • Students use interactive MS Word docs to move HTML parts into their correct position. • Students create the root folder, CSS folder, Images folder, and index file for their culminating project

Assessments

Performance Task(s) Authentic application to evaluate student achievement of desired results designed according to GRASPS (one per marking period)	**Other Evidence** Application that is functional in a classroom context to evaluate student achievement of desired results
	• Students will complete formative assessments until they reach 80% proficiency • Observations made in collaborative groups and class discussions • Student responses in journal entries • Completion of assignments • Pre-assessment results and student evaluation of previous knowledge • Reflective writing • Responses to review questions with and without resources • Completion of worksheets using objective questions

Suggested Resources

- Duckett, Jon. HTML & CSS: Design and Build Websites. Indianapolis, IN: Wiley, 2011. Print.
- "HTML Color Picker." ColorPicker.com. N.p., n.d. Web. 09 July 2015.
- "HTML." W3Schools Online Web Tutorials. N.p., n.d. Web. 09 July 2015.

- "Learn to Design and Develop Websites." Web Development Tutorials. N.p., n.d. Web. 09 July 2015.
- "W3C." World Wide Web Consortium (). N.p., n.d. Web. 09 July 2015.
- "Web Design & Development I." Web Design & Development I. N.p., n.d. Web. 09 July 2015.

Committee Member(s): Daryl Daniels Unit 3: HTML & Site Content	Course/Subject: Introduction to Web Design - Practical Arts Grade Level: 9-12 # of Weeks: 5-6

Identify Desired Results

Common Core Standards

- RST.9-10.3 – Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in a text.
- WHST.9-10.6 – Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.
- W.11-12.6: Use technology, including the Internet to produce, publish, and update individual or shared writing products in response to ongoing feedback including new arguments or information.
- W.11-12.10: Write routinely over extended time frames (times for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences
- SL.11-12.5: Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
- SL.11-12.1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- RST.11-12.7: Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
- RST.11-12.4: Determine the meaning of symbols, key terms, and other domain specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.
- WHST.11-12.2: Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes. a. Introduce a topic and organize complex ideas, concepts, and information so that each new elopement builds on that which precedes it to create a unified whole; including formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.

Enduring Understandings Generalizations of desired understanding via essential questions (Students will understand that ...)	**Essential Questions** Inquiry used to explore generalizations
• Most images we find on the INTERNET are copyrighted. • Attributes can be used to format how data (images/text) is viewed. • Tables are used to organize data in a webpage.	• How can a picture be inserted into a webpage? • What other types of media can we insert into a webpage? • Can HTML change colors and sizes on the webpage?

• Division elements are block element used to hold other elements for better page organization and styling. • HTML5 has new elements to insert video and audio. • HTML5 has several semantic elements that provide meaning to the browser.	• How can a hyperlink be inserted into a webpage? • How can the data in the webpage be organized? • Is there a way to group data (elements) to move it together? • What does semantics mean and what does it have to do with HTML?

Expected Performances
What students should know and be able to do

Students will know the following:

- Block level elements contain space from the left to the right margin unlike inline elements
- Text can be inserted through several types of elements
- Division elements are containers for other elements
- Images play an important role in the design of a website
- Hyperlinks can be formatted using pseudo-classes

Students will be able to do the following:

- Nest and elements within a division element
- Insert and use a table to layout the webpage's data
- Link to other pages, the INTERNET, images, and files within the website
- Insert images using relative and absolute references
- Use attributes/values to change the look of elements
- Insert ordered and unordered list
- Create a graphic that shows all parts to an HTML element

Character Attributes

- Cooperation
- Perseverance
- Honesty
- Responsibility

Technology Competencies

- Manage files and folders
- Evaluate and select the appropriate applications to productively complete tasks
- Identify and select appropriate delivery methods and tools for digital media projects
- Identify and apply appropriate design concepts and create web pages
- Identify client and target audience needs
- Identify basic network connectivity concepts
- Students evaluate the accuracy and quality of their online work
- Students use technology tools to enhance learning, increase productivity and promote creativity
- Students practice responsible use of technology systems, information and software
- Develop a mastery of technology tools required to enhance academic, business and personal performance for success

- Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources
- Students create original works as a means of personal or group expression.
- Students apply existing knowledge to generate new ideas, products, and processes
- Students demonstrate a sound understanding of technology concepts, systems, and operations

Develop Teaching and Learning Plan

Teaching Strategies:

- Teacher demonstrates the difference between a block level and inline element
- Teacher list and explains different elements used to insert text and provides specific uses for each
- Teacher initiates and monitors discussions in small groups determining uses for table and list elements
- Teacher shows video tutorials demonstrating correct use of elements
- Teacher demonstrates inserting hyperlinks using relative and absolute references
- Teacher demonstrates inserting images using relative and absolute references
- Teacher uses text, interactive, and video tutorials to guide student directed learning

Learning Activities:

- Students create a table to list inline and block level elements and include the appropriate code to change each to the other
- Students create an HTML file to show methods of inserting text
- Students create an HTML file to show different types of hyperlinks
- Students create an HTML file to show the different methods of inserting images
- Students watch/read tutorials and respond to and generate questions
- Students read about and fill in missing data regarding division and semantic elements
- Students interpret and discuss questions in small groups
- Students save appropriate, non-copyrighted images to be inserted into their webpages
- Students create models to show different ways to use hyperlinks and insert images
- Students work with partners to create an HTML file and implement several HTML elements
- Students create a second page and implement several required HTML elements into the homepage of their culminating project

Assessments

Performance Task(s)	Other Evidence
Authentic application to evaluate student achievement of desired results designed according to GRASPS (one per marking period)	Application that is functional in a classroom context to evaluate student achievement of desired results

Goal: Use a text editor to insert the necessary HTML code to present material specified by client. **Role**: Entrepreneurial partner in a Web Design business **Audience**: Client (Owner of small business in _____) **Situation**: Client X hired you to create a website for their business. You and your partner are using the notes you have gathered in your initial meeting to implement the HTML necessary to show the content your client would like on the homepage of their website. **Product or Performance**: A root folder containing an "images" folder and a file comprised of the necessary HTML to present clients material and be used as the homepage of the website. **Standards for Success**: Appearance of all elements necessary to properly host client's material (student rubric).	• Students will complete a summative assessment regarding pre-coding activities and the use of HTML including attributes and their values • Students will complete formative assessments until they reach 80% proficiency • Observations made in collaborative groups and class discussions • Student responses in journal entries • Completion of assignments • Pre-assessment results and student evaluation of previous knowledge • Reflective writing • Responses to review questions with and without resources • Completion of worksheets using objective questions • Students will demonstrate knowledge of technology terms presented

Suggested Resources

- Duckett, Jon. HTML & CSS: Design and Build Websites. Indianapolis, IN: Wiley, 2011. Print.
- "HTML Color Picker." ColorPicker.com. N.p., n.d. Web. 09 July 2015.
- "HTML." W3Schools Online Web Tutorials. N.p., n.d. Web. 09 July 2015.
- "Learn to Design and Develop Websites." Web Development Tutorials. N.p., n.d. Web. 09 July 2015.
- "W3C." World Wide Web Consortium (). N.p., n.d. Web. 09 July 2015.
- "Web Design & Development I." Web Design & Development I. N.p., n.d. Web. 09 July 2015.

Committee Member(s): Daryl Daniels Unit 4: Introduction to CSS	Course/Subject: Introduction to Web Design - Practical Arts Grade Level: 9-12 # of Weeks: 1-2

Identify Desired Results

Common Core Standards

- RST.9-10.3 – Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in a text.
- W.11-12.10: Write routinely over extended time frames (times for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences
- SL.11-12.1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- RST.11-12.4: Determine the meaning of symbols, key terms, and other domain specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.

Enduring Understandings Generalizations of desired understanding via essential questions (Students will understand that ...)	**Essential Questions** Inquiry used to explore generalizations
• CSS3 is the preferred method for styling and formatting an HTML webpage. • CSS can be implemented in three ways (inline, internal, and external). • Internal and external CSS syntax includes selectors and style declarations.	• How are websites formatted or styled to include color and achieve a desired layout? • How is CSS implemented into HTML?

Expected Performances
What students should know and be able to do

Students will know the following:

- How and where to insert inline, internal, and external CSS
- Inline CSS takes precedent over internal and external

Students will be able to do the following:

- Insert inline, internal, and external CSS appropriately
- Create a graphic showing the proper syntax for external CSS
- Insert the appropriate element, attribute, and value in the "head" element in order to provide internal CSS

Character Attributes

- Cooperation
- Perseverance
- Responsibility

Technology Competencies

- Manage files and folders

- Identify and apply appropriate design concepts and create web pages
- Students evaluate the accuracy and quality of their online work
- Students use technology tools to enhance learning, increase productivity and promote creativity
- Students practice responsible use of technology systems, information and software
- Develop a mastery of technology tools required to enhance academic, business and personal performance for success
- Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources
- Students create original works as a means of personal or group expression.
- Students apply existing knowledge to generate new ideas, products, and processes
- Students demonstrate a sound understanding of technology concepts, systems, and operations

Develop Teaching and Learning Plan

Teaching Strategies:	Learning Activities:
• Teacher demonstrates and discusses the necessary elements to insert internal CSS • Teacher will presents the three methods for inserting CSS • Teacher leads discussion regarding when and why to use each of the three CSS methods • Teacher demonstrates the three techniques to insert CSS • Teacher provides graphics demonstrating the correct syntax for internal CSS • Teacher poses questions through his/her website for students to discuss and respond to in their journals • Teacher will lead discussions (question & answers) regarding previously covered material	• Students define and apply the parts of a CSS selector and style declaration • Students interpret and discuss questions in small groups • Students recreate graphics representing CSS internal syntax and the element necessary to implement • Students watch or read tutorials and respond to questions • Students create questions about completed tutorials • Students use interactive MS Word docs to move CSS parts into their correct position • Students create an HTML file to show the different methods of inserting CSS • Students watch/read tutorials and respond to and generate questions

Assessments

Performance Task(s) Authentic application to evaluate student achievement of desired results designed according to GRASPS (one per marking period)	**Other Evidence** Application that is functional in a classroom context to evaluate student achievement of desired results
	• Students will complete formative assessments until they reach 80% proficiency • Observations made in collaborative

	groups and class discussions • Completion of a full webpage implementing specific criteria with a partner • Student responses in journal entries • Completion of assignments • Pre-assessment results and student evaluation of previous knowledge • Reflective writing • Responses to review questions with and without resources • Completion of worksheets using objective questions • Students will demonstrate knowledge of technology terms presented

Suggested Resources

- Duckett, Jon. HTML & CSS: Design and Build Websites. Indianapolis, IN: Wiley, 2011. Print.
- "HTML Color Picker." ColorPicker.com. N.p., n.d. Web. 09 July 2015.
- "HTML." W3Schools Online Web Tutorials. N.p., n.d. Web. 09 July 2015.
- "Learn to Design and Develop Websites." Web Development Tutorials. N.p., n.d. Web. 09 July 2015.
- "W3C." World Wide Web Consortium (). N.p., n.d. Web. 09 July 2015.
- "Web Design & Development I." Web Design & Development I. N.p., n.d. Web. 09 July 2015.

Committee Member(s): Daryl Daniels Unit 5: CSS & Styling Elements	Course/Subject: Introduction to Web Design - Practical Arts Grade Level: 9-12 # of Weeks: 3-4

Identify Desired Results

Common Core Standards

- RST.9-10.3 – Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in a text.
- WHST.9-10.6 – Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.
- W.11-12.6: Use technology, including the Internet to produce, publish, and update individual or shared writing products in response to ongoing feedback including new arguments or information.
- W.11-12.10: Write routinely over extended time frames (times for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences
- SL.11-12.5: Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
- SL.11-12.1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

Enduring Understandings Generalizations of desired understanding via essential questions (Students will understand that ...)	**Essential Questions** Inquiry used to explore generalizations
• Block level elements take into consideration the box model which is made up of margin, border, and padding. • The most common selectors are element, class, id, and the universal selector. • The position property allows elements to be moved to specific locations on a webpage. • Pseudo-classes change the appearance of hyperlinks depending on their "state".	• What kind of selectors can be used in CSS? • How can elements be moved to different parts of the webpage? • How are borders and colors inserted into a webpage?

Expected Performances
What students should know and be able to do

Students will know the following:

- There are many different properties in CSS
- When to use each of the different selectors we will be discussing

- The parts of the box model how it effects the size of elements
- The four main values of the position property and the meaning of each
- Nesting elements in a container can assist with a webpage's layout

Students will be able to do the following:

- Use the position property to create a professional appearing layout
- Demonstrate how nesting elements in containers assists with the page's layout
- Use the "id" selector effectively
- Determine the correct selector for styling elements
- Determine how the box model effects elements and productively implement

Character Attributes

- Cooperation
- Perseverance
- Responsibility

Technology Competencies

- Manage files and folders
- Evaluate and select the appropriate applications to productively complete tasks
- Identify and apply appropriate design concepts and create web pages
- Students use technology tools to enhance learning, increase productivity and promote creativity
- Students practice responsible use of technology systems, information and software
- Develop a mastery of technology tools required to enhance academic, business and personal performance for success
- Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources
- Students create original works as a means of personal or group expression.
- Students apply existing knowledge to generate new ideas, products, and processes
- Students demonstrate a sound understanding of technology concepts, systems, and operations

Develop Teaching and Learning Plan

Teaching Strategies:	Learning Activities:
• Teacher demonstrates and discusses the parts of the box model • Teacher presents and discusses a variety of selectors • Teacher demonstrates the use of pseudo classes and explains hyperlink "states" • Teacher provides graphics demonstrating effects of the box model on element size • Teacher poses questions through	• Students will group selectors to format a table • Students create an HTML file to show proper use of the four selectors discussed • Students create an HTML file to show to style hyperlink states using pseudo-classes • Students style an image using the box method • Students watch/read tutorials and respond to and generate questions

his/her website for students to discuss and respond to in their journals • Teacher will lead discussions (question & answers) regarding previously covered material	• Students interpret and discuss questions in small groups • Students create models to highlight the different selectors • Students work with partners to style the HTML file they created with a partner in the third unit

Assessments

Performance Task(s) Authentic application to evaluate student achievement of desired results designed according to GRASPS (one per marking period)	**Other Evidence** Application that is functional in a classroom context to evaluate student achievement of desired results
	• Students complete summative assessment regarding the implementation and syntax of CSS • Students will complete formative assessments until they reach 80% proficiency • Observations made in collaborative groups and class discussions • Completion of styled webpage implementing specific CSS criteria with a partner • Student responses in journal entries • Completion of assignments • Pre-assessment results and student evaluation of previous knowledge • Reflective writing • Responses to review questions with and without resources • Completion of worksheets using objective questions • Students will demonstrate knowledge of technology terms presented

Suggested Resources

- Duckett, Jon. HTML & CSS: Design and Build Websites. Indianapolis, IN: Wiley, 2011. Print.
- "HTML Color Picker." ColorPicker.com. N.p., n.d. Web. 09 July 2015.
- "HTML." W3Schools Online Web Tutorials. N.p., n.d. Web. 09 July 2015.
- "Learn to Design and Develop Websites." Web Development Tutorials. N.p., n.d. Web. 09 July 2015.
- "W3C." World Wide Web Consortium (). N.p., n.d. Web. 09 July 2015.
- "Web Design & Development I." Web Design & Development I. N.p., n.d. Web. 09 July 2015.

Committee Member(s):	Course/Subject:
Daryl Daniels	Introduction to Web Design - Practical Arts

Unit 6: Completing and Presenting Project Portfolio	Grade Level: 9-12 # of Weeks: 2-3

Identify Desired Results

Common Core Standards

- WHST.9-10.6 – Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.
- W.11-12.6: Use technology, including the Internet to produce, publish, and update individual or shared writing products in response to ongoing feedback including new arguments or information.
- W.11-12.10: Write routinely over extended time frames (times for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences
- SL.11-12.5: Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
- SL.11-12.1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- RST.11-12.7: Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
- WHST.11-12.2: Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes. a. Introduce a topic and organize complex ideas, concepts, and information so that each new elopement builds on that which precedes it to create a unified whole; including formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.

Enduring Understandings Generalizations of desired understanding via essential questions (Students will understand that ...)	**Essential Questions** Inquiry used to explore generalizations
• When referencing an element outside of a website an absolute reference must be used. • When referencing an element within a website a relative reference is used. • The INTERNET can be extremely helpful in assisting education.	• How can websites be linked together? • What CSS properties beyond those covered are useful and help make a website appear professional? • Which online resources are most convenient to assist with problem solving HTML and CSS questions?

Expected Performances
What students should know and be able to do

Students will know the following:

- How to insert each of the HTML elements found in the rubric for the culmination project/portfolio rubric.
- How to use and reference class and id selectors.
- How to use W3schools.com and other resources to problem solve.

Students will be able to do the following:

- Demonstrate successful use of all HTML elements, CSS selectors, and CSS properties/value found in the culmination project/portfolio rubric.

Character Attributes

- Integrity
- Perseverance
- Responsibility
- Cooperation
- Respect
- Courage
- Compassion

Technology Competencies

- Manage files and folders
- Identify and select appropriate delivery methods and tools for digital media projects
- Identify and apply appropriate design concepts and create web pages
- Identify client and target audience needs
- Identify basic network connectivity concepts
- Students evaluate the accuracy and quality of their online work
- Students use technology tools to enhance learning, increase productivity and promote creativity
- Students practice responsible use of technology systems, information and software
- Develop a mastery of technology tools required to enhance academic, business and personal performance for success
- Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources
- Students create original works as a means of personal or group expression.
- Students apply existing knowledge to generate new ideas, products, and processes
- Students demonstrate a sound understanding of technology concepts, systems, and operations

Develop Teaching and Learning Plan

Teaching Strategies:	Learning Activities:
• Teacher demonstrates the use of websites to problem solve • Teacher demonstrates the process of submitting student projects using the network • Teacher will demonstrate how to use the project rubric • Teacher will inform students on how to complete the self-assessment worksheet	• Students will collaborate in teams of 3-4 to evaluate student work • Students will self asses their work on the culminating project/portfolio • Students will present their project/portfolio

Assessments

Performance Task(s) Authentic application to evaluate student achievement of desired results designed according to GRASPS (one per marking period)	Other Evidence Application that is functional in a classroom context to evaluate student achievement of desired results
Goal: Complete electronic portfolio including examples of student's original HTML/CSS work. **Role**: Applicant for paid internship at a local Web Design company. **Audience**: Interviewer. **Situation**: You have conducted a skype interview with a local business to secure a position as a paid intern working with HTML and CSS to create and maintain commercial websites. You have been asked to present a portfolio of your HTML and CSS work for round two of the interview process. You have two weeks to gather the work necessary to complete and polish your portfolio. **Product or Performance**: Completed Portfolio presented to potential employer (peers) **Standards for Success**: Hired as paid intern (approval of peers) justified by integration of class work and individual project work corroborated (rubric) by presented material and submission electronically.	• Students review their summative assessment • Observations made in team assessments of student work • Completion of project/portfolio • Student responses in journal entries • Reflective writing • Students will demonstrate knowledge of technology terms presented

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