

Perris Union High School District

Course of Study

A. COURSE INFORMATION		
Course Title: <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Website Development</div> <input type="checkbox"/> New <input checked="" type="checkbox"/> Revised	Subject Area: <input type="checkbox"/> Social Science <input type="checkbox"/> English <input type="checkbox"/> Mathematics <input type="checkbox"/> Laboratory Science <input type="checkbox"/> World Languages <input type="checkbox"/> Visual or Performing Arts <input checked="" type="checkbox"/> College Prep Elective <input checked="" type="checkbox"/> Other	Grade Level <input type="checkbox"/> MS <input type="checkbox"/> HS <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input checked="" type="checkbox"/> 9 <input checked="" type="checkbox"/> 10 <input checked="" type="checkbox"/> 11 <input checked="" type="checkbox"/> 12
If revised previous course name if changed <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	Is this classified as a Career Technical Education course? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Transcript Course Code/Number: <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">108131/108132</div> (To be assigned by Educational Services)	Credential Required to teach this course: <div style="border: 1px solid black; padding: 2px; font-size: small;"> <i>Designated Subjects; Career Technical Ed: Information and Communication Technology</i> <i>Single Subject; Business Industrial and Technology Education</i> </div> <p style="text-align: center; color: yellow; font-weight: bold; margin-top: 5px;">To be completed by Human Resources only.</p>	
Required for Graduation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<div style="border: 1px solid black; padding: 5px; display: flex; justify-content: space-between;"> <div style="font-family: cursive; font-size: 1.2em;">Spoke Dutton</div> <div style="font-size: 1.2em;">8/20/2021</div> </div> <p style="text-align: center; margin-top: 5px;">Signature Date</p> <p style="text-align: center; margin-top: 10px;">CaPADS CODE 8133</p>	
Meets UC/CSU Requirements? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Was this course <u>previously approved by UC</u> for PUHSD? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Will be verified by Ed Services)	Meets "Honors" Requirements? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Meets "AP" Requirements? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Value/Length of Course: <input type="checkbox"/> 0.5 (half year or semester equivalent) <input checked="" type="checkbox"/> 1.0 (one year equivalent) <input type="checkbox"/> 2.0 (two year equivalent) <input type="checkbox"/> Other:	
Submitted by: Michael Wilson Site: PVHA Date: 08/19/21		
Approvals	Name/Signature	Date
Director of Curriculum & Instruction		8/27/21
Asst. Superintendent of Educational Services		8/27/21
Governing Board		

Prerequisite(s) (REQUIRED):

None. This class can be taken individually or as part of the Computer Science Pathway. Students in the pathway should take the classes in this order: Intro to Digital Media > Computer Game Design > Website Development

Corequisite(s) (REQUIRED):**Brief Course Description (REQUIRED):**

This course teaches students the basic skills needed to create a Web page with an emphasis on the Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), Javascript, and some lite cyber security concepts. Students are also introduced to the Hypertext Transfer Protocol (HTTP), Uniform Resource Locators (URLs), how to write code using an integrated development environment (IDE), and publishing to a Web server using the file transfer protocol (FTP).

B. COURSE CONTENT**Course Purpose (REQUIRED):**

What is the purpose of this course? Please provide a brief description of the goals and expected outcomes. Note: More specificity than a simple recitation of the State Standards is needed.

Students in this course will...

- A. Compare and Contrast text-based HTML editors to GUI-based HTML editors.
- B. Examine basic HTML markup and contrast markup languages to programming languages.
- C. Compose Cascading Style Sheets (CSS) and apply styles to HTML elements.
- D. Compare the methods of applying CSS layers for page structure versus using HTML tables.
- E. Evaluate methods used to enhance an HTML-based web page.
- F. Compose an HTML document consisting of business form elements.
- G. Utilize Javascript to make webpages dynamic and interactive
- H. Explore server-side scripting concepts and build a simple login page with a connected database
- I. Use hacking techniques to compromise our website and implement various strategies to harden the site against such attacks
- J. Employ FTP to publish Web pages to a Web server.

Course Outline (REQUIRED):

Detailed description of topics covered. All historical knowledge is expected to be empirically based, give examples. Show examples of how the text is incorporated into the topics covered.

Course Outline:

1. History of the World Wide Web
 - a. Networks
 - b. Web pages and Web servers
2. Creating an HTML document
 - a. Working with block-level elements
 - b. Working with inline elements
 - c. Using element attributes
3. Exploring Web site structures
4. HTML tables
5. Creating a hypertext link
 - a. Working with linked images and image maps
 - b. Linking to resources on the Internet
 - c. Uniform resource locators (URLs)
6. Using the Link element
 - a. Using cascading style sheets (CSS)
 - b. Applying style sheets
 - c. Understanding selectors: tag, class, id and pseudo
 - d. Working with selector patterns: Contextual and Attributes
 - e. Working with styles developed for different media types
 - f. Working with fonts and text styles
 - g. Understanding how to apply color with CSS
 - h. Floating an element
 - i. Working with the box model
 - j. Working with overflow and clipping
 - k. Controlling page layout with div containers
 - l. Applying styles to lists
 - m. Positioning and layering with CSS
7. Working with images
8. Web forms
 - a. Form elements
 - b. Applying CSS to form elements
9. Using multimedia in Web pages
 - a. Object data sources and MIME types
 - i. Working with parameters
 - b. Exploring digital video
 - c. Working with Objects
10. Javascript
 - a. Variables
 - b. Arithmetic operators and conditional branching
 - c. Loops
 - d. Arrays
 - e. DOM

- f. CSS, JS, Events, and Timers
- 11. Introduction to server-side
 - a. server-side scripting in php
 - b. mysql databases
 - c. using ethical hacking to harden sites against attack

Writing Assignments (REQUIRED):

Give examples of the writing assignments and the use of critical analysis within the writing assignments.

Students in this course will write the code necessary to create dynamic websites. Students will use a combination of HTML, CSS, & Javascript to complete all assignments. All graphical assets for each project will be created in Adobe Photoshop and Adobe Illustrator

An example of the first project requires students to create a simple 3 page website for a restaurant using HTML tables for layout. Links to all pages, from all pages is required.

Students are introduced to CSS later which allows them to create more visually appealing projects. Students will stop using HTML tables and start using DIV elements for page layout purposes.

As skills continue to build, students will learn to use media queries to make their websites scalable and responsive. This allows a website to reorganize itself depending on the device screen size.

Ultimately, javascript is introduced and students will be required to make their sites more interactive by creating functions that manipulate DOM elements in response to user interaction.

INSTRUCTIONAL MATERIALS (REQUIRED)

Textbook #1 None. All course reference material comes from written lectures that are accessible from canvas, google classroom, or some other digital repository.

Title:	Edition:
Author:	ISBN:
Publisher:	Publication Date:
Usage: <ul style="list-style-type: none"> ■ Primary Text ■ Read in entirety or near 	

Textbook #2 None

Title:	Edition:
Author:	ISBN:

Publisher:	Publication Date:
Usage: <input type="checkbox"/> Primary Text <input type="checkbox"/> Read in entirety or near	
Supplemental Instructional Materials <i>Please include online, and open source resources if any.</i>	
Estimated costs for classroom materials and supplies (REQUIRED). <i>Please describe in detail.</i> If more space is needed than what is provided, please attach backup as applicable.	
Cost for class set of textbooks: \$ 0.00	Description of Additional Costs: Students must use computers to create and test their code. If a computer lab is already available, then no additional costs are required. If chromebooks are to be used, then a server running web hosting tools must be supplied that students can log into to create their websites.
Additional costs:\$ 0.00 - \$100k	
Total cost per class set of instructional materials:	\$0 - 100k

Key Assignments (REQUIRED):
Please provide a detailed description of the Key Assignments including tests, and quizzes, which should incorporate not only short answers but essay questions also. How do assignments incorporate topics? Include all major assessments that students will be required to complete
<p>Tests may rarely be used as the instructor sees fit, but the primary source of assessment will come from students completing projects. Tests are ultimately a poor gauge of student understanding in computer programming classes because they often focus on irrelevant minutiae that rarely occurs in practice. A better assessment of student learning is to be found in the ability of the student to use the skills they learned to actually build a website. Effectively using the required commands to achieve a desired result not only demonstrates understanding, it also demonstrates mastery. If a student does not understand the concepts, they will not be able to the required commands or be able to complete the project. This gives the teacher an opportunity to reteach or assist as necessary until the task can be completed.</p> <p>Examples of some projects were previously stated and include:</p> <p>Creating a simple 3 page website for a restaurant using HTML tables for layout. Links to all pages, from all pages are required.</p> <p>Students are introduced to CSS later which allows them to create more visually appealing projects. Students will stop using HTML tables and start using DIV elements to develop web page layouts.</p>

As skills continue to build, students will learn to use media queries to make their websites scalable and responsive. This allows a website to reorganize itself depending on the device screen size.

Ultimately, javascript is introduced and students will be required to make their sites more interactive by creating functions that manipulate DOM elements in response to user interaction.

Instructional Methods and/or Strategies (REQUIRED):

Please list specific instructional methods that will be used.

Lecture, direct demonstration, guided practice, self paced practice, and project-based learning strategies will be used. This is very much a "learn by doing", project-based learning course.

Assessment Methods and/or Tools (REQUIRED):

Please list different methods of assessments that will be used.

Tests may rarely be used as the instructor sees fit, but the primary source of assessment will come from students completing projects. Tests are ultimately a poor gauge of student understanding in computer programming classes because they often focus on irrelevant minutiae that rarely occurs in practice. A better assessment of student learning is to be found in the ability of the student to use the skills they learned to actually build a website. Effectively using the required commands to achieve a desired result not only demonstrates understanding, it also demonstrates mastery. If a student does not understand the concepts, they will not be able to the required commands or be able to complete the project. This gives the teacher an opportunity to reteach or assist as necessary until the task can be completed.

COURSE PACING GUIDE AND OBJECTIVES (REQUIRED)

Day(s)	Objective	Standard(s)	Chapter(s)	Reference
CTE standards referenced here are listed in the document found at: https://www.cde.ca.gov/ci/ct/sf/documents/ctestdfrontpages.pdf				
1-14	1. History of the World Wide Web a. Networks b. Web pages and Web servers	3,6,8,9,11,12		
15-31	2. Creating an HTML document a. Working with block-level elements b. Working with inline elements c. Using element attributes	1,2,4,5,9,10		

32-47	3. Exploring Web site structures	1,2,4,5,9,10		
48-53	4. HTML tables	1,2,4,5,9,10		
54-58	5. Creating a hypertext link <ul style="list-style-type: none"> a. Working with linked images and image maps b. Linking to resources on the Internet c. Uniform resource locators (URLs) 	1,2,4,5,9,10		
59-90	6. Using the Link element <ul style="list-style-type: none"> a. Using cascading style sheets (CSS) b. Applying style sheets c. Understanding selectors: tag, class, id and pseudo d. Working with selector patterns: Contextual and Attributes e. Working with styles developed for different media types f. Working with fonts and text styles g. Understanding how to apply color with CSS h. Floating an element i. Working with the box model j. Working with overflow and clipping k. Controlling page layout with div containers l. Applying styles to lists m. Positioning and layering with CSS 	1, 2, 4, 5, 8, 9, 10, 11, 12		
91-100	7. Working with images	1,2,4,5,9,10		
101-120	8. Web forms <ul style="list-style-type: none"> a. Form elements b. Applying CSS to form elements 	1,2,4,5,9,10		
120-125	9. Using multimedia in Web pages <ul style="list-style-type: none"> a. Object data sources and MIME 	1,2,4,5,9,10		

	<ul style="list-style-type: none"> types i. Working with parameters b. Exploring digital video c. Working with Objects 			
125-160	<ul style="list-style-type: none"> 10. Javascript <ul style="list-style-type: none"> a. Variables b. Arithmetic operators and conditional branching c. Loops d. Arrays e. DOM f. CSS, JS, Events, and Timers 	1, 2, 4, 5, 8, 9, 10, 11, 12		
161-180	<ul style="list-style-type: none"> 11. Introduction to server-side <ul style="list-style-type: none"> a. server-side scripting in php b. mysql databases c. using ethical hacking to harden sites against attack 	12		

C. HONORS COURSES ONLY

Indicate how much this honors course is different from the standard course.

D. BACKGROUND INFORMATION
Context for course (optional)
History of Course Development (optional)
<p>This submission is an update to the Web Development course we currently offer. Computer science is an ever-changing field. Web technologies change especially quickly and the industry has changed dramatically since this course was originally adopted. This course needs to be updated as a result to remain relevant and to maintain articulation agreements with our college partners</p>