FREEHOLD REGIONAL HIGH SCHOOL DISTRICT
OFFICE OF CURRICULUM AND INSTRUCTION
CAREER AND TECHNICAL EDUCATION

HONORS ADVANCED WEB DESIGN
Web Design Pathway Program

Grade Level: 11

Credits: 5

BOARD OF EDUCATION ADOPTION DATE: August 26, 2019
Updated: August 25, 2022

FREEHOLD REGIONAL HIGH SCHOOL DISTRICT

Board of Education

Mr. Peter Bruno, **President**
Mr. Marc Parisi, **Vice President**
Ms. Jamie Bruno
Ms. Diana Cappiello
Ms. Debra Fanelli
Ms. Elizabeth Higley
Ms. Kathie Lavin
Mr. Michael Messinger
Mr. Heshy Moses

Central Administration

Dr. Charles Sampson, Superintendent
Dr. Nicole Hazel, Chief Academic Officer
Dr. Shanna Howell, Director of Curriculum and Instruction
Ms. Stephanie Mechmann, Administrative Supervisor of Curriculum and Instruction
Mr. Oscar Diaz, Administrative Supervisor of Curriculum and Instruction

Curriculum Writing Committee

Mr. Gregory Kilgore
Ms. Megan Herbert
Ms. Ashley McDonald

Supervisors

Mr. John Hein
Mr. David Fusco

HONORS ADVANCED WEB DESIGN

LEARNER PROFILE

The aim of the Web Design CTE Program is to develop critical-thinking students in the field of Web Design and prepare them for college and careers in this field by developing transferable, marketable skills. Our students strive to be:

- **Inquisitive**: They possess curiosity about how technology works and how web design happens. They tinker in order to figure out how things work.
- **Logical Problem-Solvers**: They gain satisfaction from solving challenging problems efficiently and effectively. These students enjoy breaking down problems into smaller chunks in order to create better solutions, and yet are also open-minded to other possible solutions. They are not afraid of digging further to reach a proper solution.
- **Focused**: They possess an intrinsic drive to be successful in their interests. They know what they want to achieve and are invested in it.
- **Passionate**: They are interested in informational technology and modern creative design. They choose to pursue these interests on their own time outside of school.
- **Perseverance**: They are not afraid of failure and will keep trying to get it right. They understand that learning comes from failures and mistakes.
- **Creative**: They have an artistic flair or a design sensibility. They are original and like to think outside the box. They enjoy creating something original that others will use.

Course Description

The Honors Advanced Web Design course is the second course in the Career and Technical Education (CTE) Web Design Pathway Program. Web Design students will apply coding knowledge and skills incorporating the application of JavaScript programming language. Students will learn programming problem solving skills and strategies to create and maintain interactive websites according to customer specifications. In this course, students will gain a deep understanding of JavaScript and other essential concepts including Java, Python and Objective-C, Swift. These concepts include variables, functions, loops, events and programming problem solving strategies. Students will solve problems collaboratively and creatively in an environment mirroring that of the industry.

In this course students may engage in a meaningful Structured Learning Experiences (SLE) to apply knowledge and skills in an environment mirroring that of industry. The SLE will help students clarify career interests and goals, explore career possibilities, develop employability skills, demonstrate and apply high level academic and technical skills, and make the transition between high school and employment and/or further education and training. Students will create and maintain professional high quality websites meeting customer needs.

Course Sequence and Pacing

Unit Title	Unit Sections	Suggested Pacing
Unit 1: HTML & CSS	1.1: Knowledge of Content 1.2: Application of Content/Real World Application 1.3: Career Exploration 1.4: Individual Portfolio	12 Sessions
Unit 2: Programming Basics	2.1: Knowledge of Content 2.2: Application of Content/Real World Application 2.3: Career Exploration 2.4: Individual Portfolio	12 Sessions
Unit 3: Introduction to Developing Scripts	3.1: Knowledge of Content 3.2: Application of Content/Real World Application 3.3: Career Exploration 3.4: Individual Portfolio	12 Sessions
Unit 4: Introduction to JavaScript	4.1: Knowledge of Content 4.2: Application of Content/Real World Application 4.3: Career Exploration	12 Sessions

	4.4: Individual Portfolio	
Unit 5: Data Types	5.1: Knowledge of Content 5.2: Application of Content/Real World Application 5.3: Career Exploration 5.4: Individual Portfolio	12 Sessions
Unit 6: Functions	6.1: Knowledge of Content 6.2: Application of Content/Real World Application 6.3: Career Exploration 6.4: Individual Portfolio	12 Sessions
Unit 7: Control Structures	7.1: Knowledge of Content 7.2: Application of Content/Real World Application 7.3: Career Exploration 7.4: Individual Portfolio	12 Sessions
Unit 8: Document Object Model	8.1: Knowledge of Content 8.2: Application of Content/Real World Application 8.3: Career Exploration 8.4: Individual Portfolio	12 Sessions
Unit 9: Events	9.1: Knowledge of Content 9.2: Application of Content/Real World Application 9.3: Career Exploration 9.4: Individual Portfolio	12 Sessions
Unit 10: Capstone Project	10.1: Knowledge of Content 10.2: Application of Content/Real World Application 10.3: Career Exploration 10.4: Individual Portfolio	12 Sessions
Support Resources		
Supporting resources and appendices for this curriculum are available. These include a Resource Catalog of standards-aligned activities, common formative assessment and interdisciplinary items for performance expectations and objectives in this course. ● HONORS ADVANCED WEB DESIGN Resource Catalog ● Appendix A: Accommodations and Modifications for Various Student Populations ● Appendix B: Assessment Evidence ● Appendix C: Interdisciplinary Connections		

Honors Advanced Web Design **Unit 1: HTML & CSS** **Section 1.1: Knowledge of Content**	**Suggested Pacing:3 Sessions**
NJSLS Performance Expectations	
9.3.IT-WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.	
9.3.IT-WD.2 Apply the design and development process to produce user-focused Web and digital communications solutions.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 1-1[1]Define what an HTML element is and give examples of common elements used	
WDPP2 1-1[2]Define what CSS is, what the acronym stands for, and give examples of properties commonly modified	
WDPP2 1-1[3]Identify opening, closing, and self-closing tags in HTML	
WDPP2 1-1[4]Explain what an attribute is and the correct syntax for adding attributes to an HTML element	
WDPP2 1-1[5]Identify the selector and declaration block in a CSS rule	
WDPP2 1-1[6]Explain what Bootstrap is and why it is used	
WDPP2 1-1[7]Describe Bootstrap's grid system and how it is used to create responsive websites	

Honors Advanced Web Design **Unit 1: HTML & CSS** **Section 1.2: Application of Content/Real World Application**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.3.IT-WD.1 Analyze customer requirements to design and develop a Web or digital communication product.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 1-2[1] Create a responsive website from scratch, using HTML, CSS, and Bootstrap	

Honors Advanced Web Design **Unit 1: HTML & CSS** **Section 1.3: Career Exploration**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.2.12.CAP.4 Evaluate different careers and develop various plans (e.g. costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 1-3[1] Identify career pathways that highlight personal talents, skills and abilities	

Honors Advanced Web Design **Unit 1: HTML & CSS** **Section 1.4: Individual Portfolio** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.4.12.CI.2 Identify career pathways that highlight personal talents, skills and abilities.
9.3.IT-WD.5 Develop, administer and maintain Web applications.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 1-4[1] Explain the purpose and importance of an individual digital portfolio
WDPP2 1-4[2] Create/Update individual digital portfolio which will be used and updated all three years of the program

Honors Advanced Web Design **Unit 2: Programming Basics** **Section 2.1: Knowledge of Content** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.3.IT-WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.
9.3.IT-WD.2 Apply the design and development process to produce user-focused Web and digital communications solutions.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 2-1[1] Define the term script when talking about programming and explain what it means to have a programmatic approach to problem-solving
WDPP2 2-1[2] Explain the relationship between objects, properties, and values
WDPP2 2-1[3] Define an event and explain what events do in a program
WDPP2 2-1[4] Explain what a method is in JavaScript, what they do, and why they are used
WDPP2 2-1[5] Identify the objects used to build web browsers

Honors Advanced Web Design **Unit 2: Programming Basics** **Section 2.2: Application of content / Real world application** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.3.IT-WD.1 Analyze customer requirements to design and develop a Web or digital communication product.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 2-2[1] Create a flowchart that first defines a goal, then breaks the goal into a series of tasks needed to meet the goal, finally, identify the individual steps needed to complete each task
WDPP2 2-2[2] Develop simple charts that identify objects and their properties/values in a real-world scenario
WDPP2 2-2[3] Identify events that could be applied to specific objects and methods that could be used to handle such events
WDPP2 2-2[4] Develop a table that breaks down the document object into properties, events, and methods

WDPP2 2-2[5] Create a hierarchy tree representing the object, elements, text, and attributes of a web page

Honors Advanced Web Design **Unit 2: Programming Basics** **Section 2.3: Career Exploration Sessions** **Suggested Pacing: 3**
NJSLS Performance Expectations
9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g. costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 2-3[1] Describe different emerging technologies in the current world

Honors Advanced Web Design **Unit 2: Programming Basics** **Section 2.4: Individual Portfolio Sessions** **Suggested Pacing: 3**
NJSLS Performance Expectations
9.4.12.CI.2 Identify career pathways that highlight personal talents, skills and abilities.
9.3.IT-WD.5Develop, administer and maintain Web applications.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 2-4[1] Identify strengths and weakness of your portfolio design

Honors Advanced Web Design **Unit 3: Introduction to Developing Scripts** **Section 3.1: Knowledge of Content** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.3.IT-WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.
9.3.IT-WD.2 Apply the design and development process to produce user-focused Web and digital communications solutions.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 3-1[1] Explain how HTML, CSS, and JavaScript are linked together
WDPP2 3-1[2] Define the various ways that JavaScript can be linked to an HTML file
WDPP2 3-1[3] Identify when the JavaScript is run when the HTML file is loaded in the browser

Honors Advanced Web Design **Unit 3: Introduction to Developing Scripts** **Section 3.2: Application of content / Real world application** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.3.IT-WD.1 Analyze customer requirements to design and develop a Web or digital communication product.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 3-2[1] View the page source of a website that utilizes JavaScript and determine any changes are made to the HTML code
WDPP2 3-2[2] Link JavaScript to an HTML file using a <script> tag and as an external file

Honors Advanced Web Design **Unit 3: Introduction to Developing Scripts** **Section 3.3: Career exploration** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g. costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 3-3[1] Compare the programming planning process to a roadmap to the career of your choice
WDPP2 3-3[2] Create a roadmap to what could be your future career path

Honors Advanced Web Design **Unit 3: Introduction to Developing Scripts** **Section 3.4: Individual Portfolio** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.4.12.CI.2: Identify career pathways that highlight personal talents, skills and abilities.
9.3.IT-WD.5 Develop, administer and maintain Web applications.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 3-4[1] Create an updated wireframe of where your individual digital portfolio is transitioning too from 1st year to 2nd year

Honors Advanced Web Design **Unit : 4 Introduction to JavaScript** **Section 4.1: Knowledge of Content** **Suggested Pacing: 3** **Sessions**
NJSLS Performance Expectations
9.3.IT-WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.
9.3.IT-WD.2 Apply the design and development process to produce user-focused Web and digital communications solutions.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 4-1[1] Define the word syntax and how it applies to HTML, CSS, and JavaScript
WDPP2 4-1[2] Compare and contrast statements and code blocks and their respective syntax
WDPP2 4-1[3] Explain the difference in syntax when it comes to multi-line and single-line comments
WDPP2 4-1[4] Explain what a variable is, how to declare them, how to assign a value to them using proper syntax
WDPP2 4-1[5] Define the different components used to declare and assign value to a variable
WDPP2 4-1[6] List six rules for naming variables
WDPP2 4-1[7] List three common primitive data types
WDPP2 4-1[8] Define what an expression is and the two types of expressions that are used
WDPP2 4-1[9] Identify assignment, arithmetic, and string operators

Honors Advanced Web Design **Unit 4: Introduction to JavaScript** **Section 4.2: Application of content / Real world application** **Suggested Pacing: 3** **Sessions**
NJSLS Performance Expectations
9.3.IT-WD.1 Analyze customer requirements to design and develop a Web or digital communication product.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 4-2[1] Utilize comments in a script to explain what a line or block of code should be doing
WDPP2 4-2[2] Declare variables that hold numbers, strings, and booleans
WDPP2 4-2[3] Declare and assign values in the same statement
WDPP2 4-2[4] Declare multiple variables in a single statement
WDPP2 4-2[5] Create a script that changes the value of a variable
WDPP2 4-2[6] Develop a table that lists all of the arithmetic operators, what they do, and examples
WDPP2 4-2[7] Utilize the string operator to concatenate two or more strings to make a single value

Honors Advanced Web Design **Unit 4: Introduction to JavaScript** **Section 4.3: Career exploration Sessions**	**Suggested Pacing: 3**
NJSLS Performance Expectations	
9.2.12.CAP.4:Evaluate different careers and develop various plans (e.g. costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 4-3[1] Identify the most common interactions between users and webpages	

Honors Advanced Web Design **Unit 4: Introduction to JavaScript** **Section 4.4: Individual Portfolio Sessions**	**Suggested Pacing: 3**
NJSLS Performance Expectations	
9.4.12.CI.2: Identify career pathways that highlight personal talents, skills and abilities.	
9.3.IT-WD.5 Develop, administer and maintain Web applications.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 4-4[1] Update current individual portfolio with new content	

Honors Advanced Web Design **Unit 5: Data Types** **Section 5.1: Knowledge of Content Sessions**	**Suggested Pacing: 3**
NJSLS Performance Expectations	
9.3.IT-WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.	
9.3.IT-WD.2 Apply the design and development process to produce user-focused Web and digital communications solutions.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 5-1[1] List 5 primitive data types used in JavaScript	
WDPP2 5-1[2] Define what an object is in JavaScript	
WDPP2 5-1[3] Explain how dot notation is used to access properties and methods of an object	
WDPP2 5-1[4] Define what an array is and why arrays are used in programming	
WDPP2 5-1[5]Explain what an index number is and how it is used to access/modify elements inside an array	

Honors Advanced Web Design **Unit 5: Data Types** **Section 5.2: Application of Content/Real world application** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.3.IT-WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.
9.3.IT-WD.2 Apply the design and development process to produce user-focused Web and digital communications solutions.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 5-2[1] Create an array as an array literal and using an array constructor
WDPP2 5-2[2] Utilize the length property to determine the size of an array and the index number to access and modify values inside an array
WDPP2 5-2[3] Create a constructor for an object
WDPP2 5-2[4] Create new instances of an object using the constructor
WDPP2 5-2[5] Utilize dot notation to access properties and methods of object instances

Honors Advanced Web Design **Unit 5: Data Types** **Section 5.3: Career Exploration** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.2.12.CAP.4 9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g. costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 5-3[1] Research potential institutions that offer programs in your desired discipline
WDPP2 5-3[2] Create a slideshow detailing a potential institution of interest

Honors Advanced Web Design **Unit 5: Data Types** **Section 5.4: Individual Portfolio** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.4.12.CI.2:Identify career pathways that highlight personal talents, skills and abilities.
9.3.IT-WD.5 Develop, administer and maintain Web applications.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 5-4[1] Update current individual portfolio with new content

Honors Advanced Web Design **Unit 6: Functions** **Section 6.1: Knowledge of Content** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.3.IT-WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.
9.3.IT-WD.2 Apply the design and development process to produce user-focused Web and digital communications solutions.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 6-1[1] Define what a function is and how it can help organize code
WDPP2 6-1[2] Explain what it means to call a function, and determine the correct syntax
WDPP2 6-1[3] Compare and contrast parameters and arguments
WDPP2 6-1[4] Explain the process and syntax to return values from a function
WDPP2 6-1[5] Compare and contrast local scope and global scope
WDPP2 6-1[6] Explain how naming collisions can be avoided by using local variables
WDPP2 6-1[7] Compare and contrast the *this* keyword when used in a function vs a method (a function that is defined inside of an object)

Honors Advanced Web Design **Unit 6: Functions** **Section 6.2: Application of content / Real world application** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.3.IT-WD.1 Analyze customer requirements to design and develop a Web or digital communication product.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 6-2[1] Declare a function that has no parameters, a function that has a single parameter, and a function that has multiple parameters
WDPP2 6-2[2] Call a function that passes arguments as values
WDPP2 6-2[3] Call a function that passes arguments as variables

Honors Advanced Web Design **Unit 6: Functions** **Section 6.3: Career Exploration** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.2.12.CAP.4 Evaluate different careers and develop various plans (e.g. costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 6-3[1] Identify job hiring requirements

Honors Advanced Web Design **Unit 6: Functions** **Section 6.4: Individual Portfolio**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.4.12.CI.2: Identify career pathways that highlight personal talents, skills and abilities.	
9.3.IT-WD.5 Develop, administer and maintain Web applications.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 6-4[1] Update current individual portfolio with new content -- including, but not limited to functional JavaScript projects	

Honors Advanced Web Design **Unit 7: Control Structures** **Section 7.1: Knowledge of Content**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.3.IT-WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.	
9.3.IT-WD.2 Apply the design and development process to produce user-focused Web and digital communications solutions.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 7-1[1] Identify expression and conditional statement components in a decision making process	
WDPP2 7-1[2] Explain why comparison operators are used to return a boolean	
WDPP2 7-1[3] List the comparison operators used in JavaScript	
WDPP2 7-1[4] Define logical operators and explain how they can be used with comparison operators in the decision making process	
WDPP2 7-1[5] Determine which block of code will run in an if-else statement	
WDPP2 7-1[6] Identify components of a for loop	
WDPP2 7-1[7] Determine how many times a block of code will run through in a given for loop	

Honors Advanced Web Design **Unit 7 : Control Structures** **Section 7.2: Application of content/Real world application**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.3.IT-WD.1 Analyze customer requirements to design and develop a Web or digital communication product.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 7-2[1] Create a flowchart that represents a decision making process	
WDPP2 7-2[2] Develop a script that uses an if statement, comparison operators, and logical operators to determine which block of code to run	

WDPP2 7-2[3] Create a for loop using the correct syntax to achieve a predetermined outcome

Honors Advanced Web Design **Unit 7 : Control Structures** **Section 7.3: Career Exploration** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g. costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 7-3[1] Identify job responsibilities for a career that is of interest for your future

Honors Advanced Web Design **Unit 7 : Control Structures** **Section 7.4: Individual Portfolio** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.4.12.CI.2: Identify career pathways that highlight personal talents, skills and abilities.
9.3.IT-WD.5 Develop, administer and maintain Web applications.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 7-4[1] Update current individual portfolio with new content -- including, but not limited to functional JavaScript projects

Honors Advanced Web Design **Unit 8 : Document Object Model** **Section 8.1: Knowledge of Content** **Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations
9.3.IT-WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.
9.3.IT-WD.2 Apply the design and development process to produce user-focused Web and digital communications solutions.
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:
WDPP2 8-1[1] Identify element nodes, attribute nodes, and text nodes in a DOM Tree
WDPP2 8-1[2] Explain what it means to cache a DOM query
WDPP2 8-1[3] Identify methods that return single element nodes and methods that return multiple element nodes in a list
WDPP2 8-1[4] Compare and contrast innerHTML and DOM manipulation methods
WDPP2 8-1[5] Identify methods commonly used for manipulating the DOM

Honors Advanced Web Design **Unit 8 : Document Object Model** **Section 8.2: Application of content/Real world application**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.3.IT-WD.1 Analyze customer requirements to design and develop a Web or digital communication product.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 8-2[1] Develop a DOM Tree diagram based on an HTML document	
WDPP2 8-2[2] Utilize DOM queries to access different elements in an HTML document	
WDPP2 8-2[3] Utilize the innerHTML property of the DOM to add or remove HTML content	
WDPP2 8-2[4] Develop a web page that includes instances of DOM manipulation	

Honors Advanced Web Design **Unit 8 : Document Object Model** **Section 8.3: Career Exploration**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g. costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 8-3[1] Describe questions and possible responses to a variety of interview questions	

Honors Advanced Web Design **Unit 8 : Document Object Model** **Section 8.4: Individual Portfolio**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.4.12.CI.2: Identify career pathways that highlight personal talents, skills and abilities.	
9.3.IT-WD.5 Develop, administer and maintain Web applications.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 8-4[1] Update current individual portfolio with new content -- including, but not limited to functional JavaScript projects	

Honors Advanced Web Design **Unit 9: Events** **Section 9.1: Knowledge of Content**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.3.IT-WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.	
9.3.IT-WD.2 Apply the design and development process to produce user-focused Web and digital communications solutions.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 9-1[1] Identify UI, keyboard, mouse, focus, and form events	
WDPP2 9-1[2] Define the three steps of event handling	
WDPP2 9-1[3] List three different ways to bind an event to an element	
WDPP2 9-1[4] Explain the different information the Event Object returns after an event occurs	

Honors Advanced Web Design **Unit 9: Events** **Section 9.2: Application of content / Real world application**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.3.IT-WD.1 Analyze customer requirements to design and develop a Web or digital communication product.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 9-2[1] Create a script that utilizes traditional DOM event handlers	
WDPP2 9-2[2] Create a script that utilizes event listeners	

Honors Advanced Web Design **Unit 9: Events** **Section 9.3: Career Exploration**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g. costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 9-3[1] Utilize interview questions from previous unit to to conduct live interviews	

Honors Advanced Web Design **Unit 9: Events** **Section 9.4: Individual Portfolio**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.4.12.CI.2: Identify career pathways that highlight personal talents, skills and abilities.	
9.3.IT-WD.5 Develop, administer and maintain Web applications.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 9-4[1] Update current individual portfolio with new content -- including, but not limited to functional JavaScript projects	

Honors Advanced Web Design **Unit 10: Capstone Project** **Section 10.1 : Knowledge of Content**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.3.IT-WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.	
9.3.IT-WD.2 Apply the design and development process to produce user-focused Web and digital communications solutions.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 10-1[1] Identify all components needed to design a professional webpage	

Honors Advanced Web Design **Unit 10: Capstone Project** **Section 10.2 : Application of content/Real world application**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.3.IT-WD.1 Analyze customer requirements to design and develop a Web or digital communication product.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 10-2[1] Create multi-faceted webpage projects implementing course-accumulated knowledge	

Honors Advanced Web Design **Unit 10: Capstone Project** **Section 10.3 : Career Exploration**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g. costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 10-3[1] Examine SLE project guidelines	
WDPP2 10-3[2] Apply for desired SLE position	

Honors Advanced Web Design **Unit 10: Capstone Project** **Section 10.4 Individual Portfolio**	**Suggested Pacing: 3 Sessions**
NJSLS Performance Expectations	
9.4.12.CI.2: Identify career pathways that highlight personal talents, skills and abilities.	
9.3.IT-WD.5 Develop, administer and maintain Web applications.	
Standards-Aligned Objectives. Instruction and assessment will align to the following objectives:	
WDPP2 10-4[1] Complete and present digital portfolio	

Honors Advanced Web Design **Technical Skill Assessment: NOCTI 2750: Web Design**	
Internet Basics	Describe how information is physically moved across the Internet
	Describe the use of web browsers and various clients (e.g., email, FTP) within a given context of use
	Identify the tools required for web publishing
	Describe the function and components of a URL (how it relates to protocols, addresses, and ports)
Programming / Markup / Scripting	Describe the difference between popular client-side and server-side programming languages
	Demonstrate the ability to create HTML/XHTML/XML pages
	Explain the functions performed by web and application servers in delivering web pages
	Use CSS to differentiate between logic, content, and presentation
	Describe the difference between a scripting language and a markup language
Editors	Create a website
	Design and implement tables and templates
	Create and use interactive forms
	Enhance site elements by using templates and style sheets
	Design and implement layers, image maps, and navigation bars
	Enhance a website with media objects and images
Web Marketing and Business Management	Explain the issues involved in copyrighting, trademarking, and licensing
	Identify the issues related to working in a global environment
	Define web-related mechanisms for audience development (attracting and retaining an audience)
	Define e-commerce terms and concepts

HONORS ADVANCED WEB DESIGN	
NJSLS Companion Standards	
RST.11-12.1	Accurately cite strong and thorough evidence from the text to support analysis of science and technical texts, attending to precise details for explanations or descriptions.
RST.11-12.2	Determine the central ideas, themes, or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
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.
RST.11-12.9	Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
WHST.11-12.9	Draw evidence from informational texts to support analysis, reflection, and research.
WHST.11-12.10	Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

NJSLS Computer Science, Career Awareness, Exploration, Preparation, and Training, and Life Literacies and Key Skills Career Readiness, Life Literacies, and Key Skills		**Unit**
9.2.12.CAP.1	Analyze unemployment rates for workers with different levels of education and how the economic, social, and political conditions of a time period are affected by a recession.	
9.2.12.CAP.2	Develop college and career readiness skills by participating in opportunities such as structured learning experiences, apprenticeships, and dual enrollment programs.	
9.2.12.CAP.3	Investigate how continuing education contributes to one's career and personal growth.	
9.2.12.CAP.4	Evaluate different careers and develop various plans (e.g. costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.	
9.2.12.CAP.5	Assess and modify a personal plan to support current interests and postsecondary plans.	
9.2.12.CAP.6	Identify transferable skills in career choices and design alternative career plans based on those skills.	
9.2.12.CAP.7	Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.	
9.2.12.CAP.8	Determine job entrance criteria (e.g., education credentials, math/writing/reading comprehension tests, drug tests) used by employers in various industry sectors.	
9.2.12.CAP.9	Locate information on working papers, what is required to obtain them, and who must sign them.	
9.2.12.CAP.10	Identify strategies for reducing overall costs of postsecondary education (e.g., tuition assistance, loans, grants, scholarships, and student loans).	
9.2.12.CAP.11	Demonstrate an understanding of Free Application for Federal Student Aid (FAFSA) requirements to apply for postsecondary education	
9.2.12.CAP.12	Explain how compulsory government programs (e.g., Social Security, Medicare) provide insurance against some loss of income and benefits to eligible recipients.	
9.2.12.CAP.13	Analyze how the economic, social, and political conditions of a time period can affect the labor market.	
9.2.12.CAP.14	Analyze and critique various sources of income and available resources (e.g., financial assets, property, and transfer payments) and how they may substitute for earned income.	
9.2.12.CAP.15	Demonstrate how exemptions, deductions, and deferred income (e.g., retirement or medical) can reduce taxable income.	

9.2.12.CAP.16	Explain why taxes are withheld from income and the relationship of federal, state, and local taxes (e.g., property, income, excise, and sales) and how the money collected is used by local, county, state, and federal governments.	
9.2.12.CAP.17	Analyze the impact of the collective bargaining process on benefits, income, and fair labor practice.	
9.2.12.CAP.18	Differentiate between taxable and nontaxable income from various forms of employment (e.g., cash business, tips, tax filing and withholding).	
9.2.12.CAP.19	Explain the purpose of payroll deductions and why fees for various benefits (e.g., medical benefits) are taken out of pay, including the cost of employee benefits to employers and self-employment income.	
9.2.12.CAP.20	Analyze a Federal and State Income Tax Return.	
9.2.12.CAP.21	Explain low-cost and low-risk ways to start a business.	
9.2.12.CAP.22	Compare risk and reward potential and use the comparison to decide whether starting a business is feasible.	
9.2.12.CAP.23	Identify different ways to obtain capital for starting a business.	
9.4.12.CI.1	Demonstrate the ability to reflect, analyze and use creative skills and ideas.	
9.4.12.CI.2	Identify career pathways that highlight personal talents, skills and abilities.	
9.4.12.CI.3	Investigate new challenges and opportunities for personal growth, advancement and transition.	
9.4.12.CT.1	Identify problem-solving strategies used in the development of an innovative product or practice.	
9.4.12.CT.2	Explain the potential benefits of collaborating to enhance critical thinking and problem solving.	
9.4.12.CT.3	Collaborate with individuals to analyze a variety of potential solutions to climate change effects and determine why solutions may work better than others (e.g., political. economic, cultural).	
9.4.12.CT.4	Enlist input from a variety of stakeholders (e.g., community members, experts in the field) to design a service learning activity that addresses a local or global issue (e.g., environmental justice).	
9.4.12.CT.5	Participate in online strategy and planning sessions for course-based, school-based or other projects and determine the strategies that contribute to effective outcomes.	
9.4.12.DC.1	Explain the beneficial and harmful effects that intellectual property laws can have on the creation and sharing of content.	
9.4.12.DC.2	Compare and contrast international differences in copyright laws and ethics.	
9.4.12.DC.3	Evaluate the social and economic implications of privacy in the context of safety, law, or ethics.	
9.4.12.DC.4	Explain the privacy concerns related to the collection of data (e.g., cookies) and generation of data through automated processes that may not be evident to users	
9.4.12.DC.5	Debate laws and regulations that impact the development and use of software.	
9.4.12.DC.6	Select information to post online that positively impacts personal image and future college and career opportunities.	
9.4.12.DC.7	Evaluate the influence of digital communities on the nature, content and responsibilities of careers, and other aspects of society.	
9.4.12.DC.8	Explain how increased network connectivity and computing capabilities of everyday objects allow for innovative technological approaches to climate protection.	
9.4.12.TL.1	Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specific task.	
9.4.12.TL.2	Generate data using formula-based calculations in a spreadsheet and draw conclusions about the data.	
9.4.12.TL.3	Analyze the effectiveness of the process and quality of collaborative environments.	

9.4.12.TL.4	Collaborate in online learning communities or social networks or virtual worlds to analyze and propose a resolution to a real-world problem.	
9.4.12.GCA.1	Collaborate with individuals analyze a variety of potential solutions to climate change effects and determine why solutions may work better than others (e.g., political. economic, cultural).	
9.4.12.IML.1	Compare search browsers and recognize features that allow for filtering of information.	
9.4.12.IML.2	Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources.	
9.4.12.IML.3	Analyze data using tools and models to make valid and reliable claims, or to determine optimal design solutions.	
9.4.12.IML.4	Assess and critique the appropriateness and impact of existing data visualizations for an intended audience.	
9.4.12.IML.5	Evaluate, synthesize and apply information on climate change from various sources appropriately.	
9.4.12.IML.6	Use various types of media to produce and store information on climate change for different purposes and audiences with sensitivity to cultural, gender and age diversity.	
9.4.12.IML.7	Develop an argument to support a claim regarding a current workplace or societal/ethical issue such as climate change.	
9.4.12.IML.8	Evaluate media sources for point of view, bias and motivations.	
9.4.12.IML.9	Analyze the decisions creators make to reveal explicit and implicit messages within information and media.	