

Unit 2: HTML Coding/PhotoShop

Content Area: **Technology**
Course(s): **Sample Course, Web Page Design**
Time Period: **Sample Time Period**
Length: **20 Days**
Status: **Published**

Title Section

Department of Curriculum and Instruction



Belleville Public Schools

Curriculum Guide

Unit 2: HTML Coding/PhotoShop

Web Page Design

Belleville Board of Education

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Board Approved: September 23, 2019

Unit Overview

In Unit 2 Web Page Design Students will cover the following topics. Pre-Coding for use of website and coding languages. Then students will focus on basic HTML Markup along with HTML Lists. Students will understand the process of creating links and creating a Data Table for website use. Students will also focus on PhotoShop Basics, Creating Images/GIF and Drag and Drop Coding.

Enduring Understanding

Students will be able to...

1. Understand the structure of HTML to create webpages.
2. Understand the use of tags in the body section of HTML code.
3. Understand the importance of links for navigation and the end users experience.
4. Understand the usage of Drag and Drop Coding
5. Demonstrate the usage of PhotoShop Skills
6. Create images for website usage
7. Understand the format and tool bar and gallery for PhotoShop

Essential Questions

1. Why is pre-coding necessary to create a successful website?
2. What elements make up a website?
3. How do tags allow web designers to create a site?

4. What is the difference between lists and when should each be used?
5. Why do coders use relative and absolute links?
6. Why is it important to follow exact drag and drop rules?
7. How will basic coding allow the creation of unique projects?
8. What will the use of GIF and Images bring to a website?
9. How will the altering of images bring more traffic to a website?
10. What links are needed to complete basic coding for movement actions?

Exit Skills

By the End of Unit 2 Web Page Design Students will be able to....

- Have an understanding of Pre-Coding
- Have an understanding of Basic HTML Markup
- Compile Basic HTML Lists
- Demonstrate inserting and Creating Links
- Creating a Data Table

- Demonstrate using PhotoShop Basics through usage with future website projects
- Understand and Create Images/GIF for website usage
- Demonstrate the usage of Drag and Drop Coding to implement with Hour of Code

New Jersey Student Learning Standards (NJSL-S)

9.3.12.BM.4	Identify, demonstrate and implement solutions in managing effective business customer relationships.
9.3.12.BM-ADM.1	Plan, staff, lead and organize human resources to enhance employee productivity and satisfaction.
9.3.12.BM-ADM.2	Access, evaluate and disseminate information for business decision making.
9.3.12.BM-MGT.3	Apply economic concepts fundamental to global business operations.
9.3.12.BM-MGT.5	Plan, monitor, manage and maintain the use of financial resources to ensure a business's financial wellbeing.
12.9.3.IT.5	Explain the implications of IT on business development.
12.9.3.IT.6	Describe trends in emerging and evolving computer technologies and their influence on IT practices.
12.9.3.IT.7	Perform standard computer backup and restore procedures to protect IT information.
12.9.3.IT.8	Recognize and analyze potential IT security threats to develop and maintain security requirements.
12.9.3.IT.9	Describe quality assurance practices and methods employed in producing and providing quality IT products and services.
12.9.3.IT.10	Describe the use of computer forensics to prevent and solve information technology crimes and security breaches.
12.9.3.IT.12	Demonstrate knowledge of the hardware components associated with information systems.
12.9.3.MK.1	Describe the impact of economics, economics systems and entrepreneurship on

	marketing.
12.9.3.MK.2	Implement marketing research to obtain and evaluate information for the creation of a marketing plan.
12.9.3.MK.3	Plan, monitor, manage and maintain the use of financial resources for marketing activities.
12.9.3.MK.5	Describe career opportunities and the means to achieve those opportunities in each of the Marketing Career Pathways.
12.9.3.MK.9	Communicate information about products, services, images and/or ideas to achieve a desired outcome.
12.9.3.MK-COM.1	Apply techniques and strategies to convey ideas and information through marketing communications.

Interdisciplinary Connections

LA.RH.11-12.2	Determine the theme, central ideas, information and/or perspective(s) presented in a primary or secondary source; provide an accurate summary of how key events, ideas and/or author's perspective(s) develop over the course of the text.
LA.RH.11-12.3	Evaluate various perspectives for actions or events; determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.
LA.RH.11-12.4	Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines faction in Federalist No. 10).
LA.RH.11-12.6	Evaluate authors' differing perspectives on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.
LA.RST.11-12.5	Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
LA.RST.11-12.6	Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.
MA.S-CP.A.2	Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.
MA.S-CP.A.3	Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A , and the conditional probability of B given A is the same as the probability of B .
MA.S-IC.A.1	Understand statistics as a process for making inferences about population parameters based on a random sample from that population.
MA.S-IC.A.2	Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation.
MA.S-ID.A.2	Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.
MA.S-ID.B.6	Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.

Learning Objectives

Students will be able to....

Individually demonstrate using PhotoShop Basics through usage with future website projects

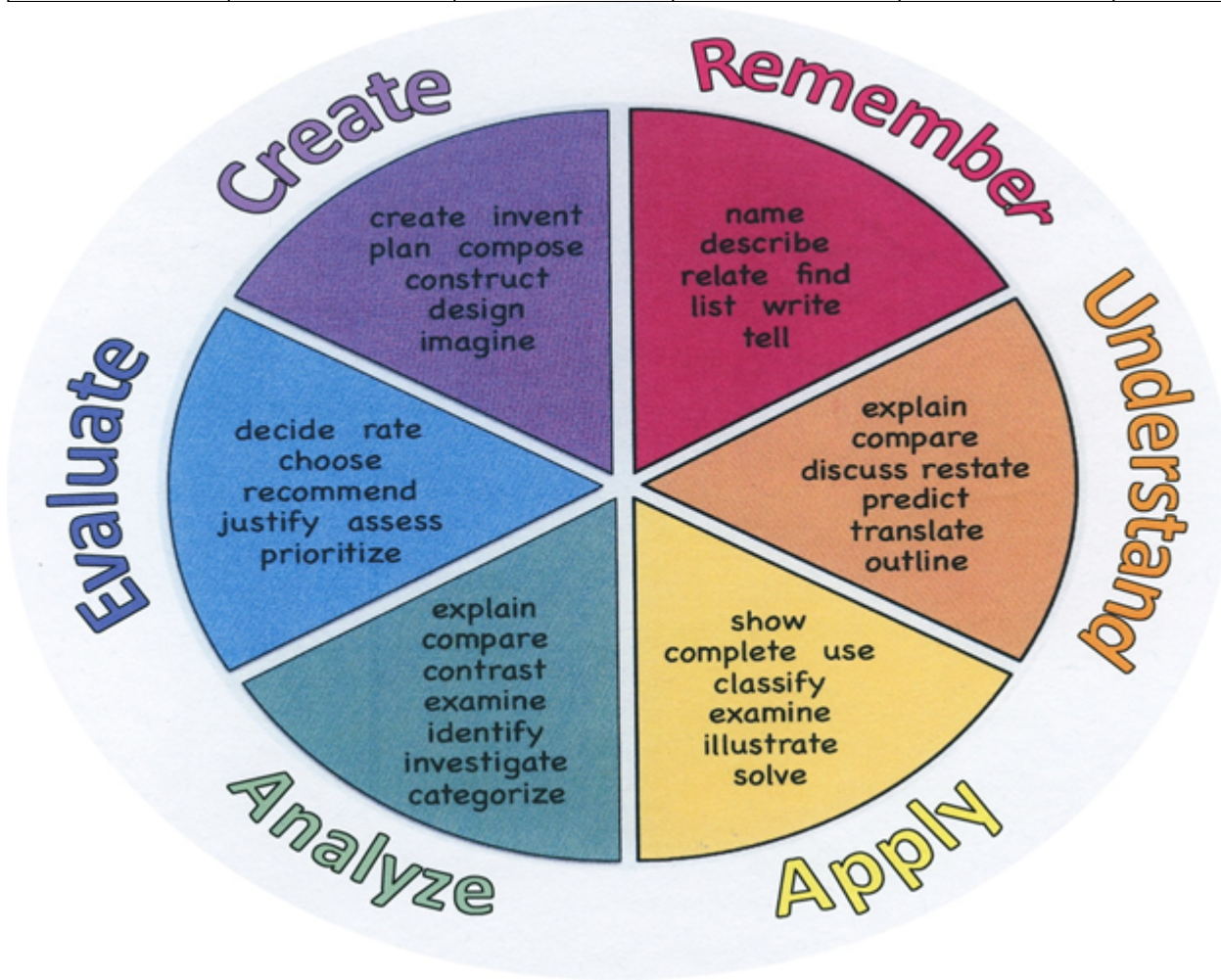
Develop and demonstrate the usage of Drag and Drop Coding to implement with Hour of Code

Organize and have an understanding of Basic HTML Markup

Develop a production storyboard of what the end website and process will look like

Remember	Understand	Apply	Analyze	Evaluate	Create
Choose	Classify	Choose	Categorize	Appraise	Combine
Describe	Defend	Dramatize	Classify	Judge	Compose
Define	Demonstrate	Explain	Compare	Criticize	Construct
Label	Distinguish	Generalize	Differentiate	Defend	Design
List	Explain	Judge	Distinguish	Compare	Develop
Locate	Express	Organize	Identify	Assess	Formulate
Match	Extend	Paint	Infer	Conclude	Hypothesize
Memorize	Give Examples	Prepare	Point out	Contrast	Invent
Name	Illustrate	Produce	Select	Critique	Make
Omit	Indicate	Select	Subdivide	Determine	Originate
Recite	Interrelate	Show	Survey	Grade	Organize
Select	Interpret	Sketch	Arrange	Justify	Plan
State	Infer	Solve	Breakdown	Measure	Produce

Count	Match	Use	Combine	Rank	Role Play
Draw	Paraphrase	Add	Detect	Rate	Drive
Outline	Represent	Calculate	Diagram	Support	Devise
Point	Restate	Change	Discriminate	Test	Generate
Quote	Rewrite	Classify	Illustrate		Integrate
Recall	Select	Complete	Outline		Prescribe
Recognize	Show	Compute	Point out		Propose
Repeat	Summarize	Discover	Separate		Reconstruct
Reproduce	Tell	Divide			Revise
	Translate	Examine			Rewrite
	Associate	Graph			Transform
	Compute	Interpolate			
	Convert	Manipulate			
	Discuss	Modify			
	Estimate	Operate			
	Extrapolate	Subtract			
	Generalize				
	Predict				



Suggested Activities & Best Practices

Students will be given handouts on a step by step process of how to use the dashboard, coding site for educational game, and drag/drop process.

Students will update sites on a weekly basis with Photoshop images and smart objects.

Assessment Evidence - Checking for Understanding (CFU)

-Students will be given hands on quizzes as well as written quizzes that will be used to enhance student knowledge-benchmark assessments

-Students will compare and contrast different coding languages for website use-alternate assessment

Unit tests-summative assessment

Admit/Exit tickets-formative assessment

- Admit Tickets
- Anticipation Guide
- Common Benchmarks
- Compare & Contrast
- Create a Multimedia Poster
- DBQ's
- Define
- Describe
- Evaluate
- Evaluation rubrics

- Exit Tickets
- Explaining
- Fist- to-Five or Thumb-Ometer
- Illustration
- Journals
- KWL Chart
- Learning Center Activities
- Multimedia Reports
- Newspaper Headline
- Outline
- Question Stems
- Quickwrite
- Quizzes
- Red Light, Green Light
- Self- assessments
- Socratic Seminar
- Study Guide
- Surveys
- Teacher Observation Checklist
- Think, Pair, Share
- Think, Write, Pair, Share
- Top 10 List
- Unit review/Test prep
- Unit tests
- Web-Based Assessments
- Written Reports

Primary Resources & Materials

Google sharing documents for class projects

Youtube Video Channels for website and coding process

Scratch platform and slides with information regarding process

Ancillary Resources

Coding based Tutorial for projects

Wix.com add-ons for each page

Online videos guidelines for Wix.com/Google Sites, and code games

Technology Infusion

Students will use computer, computer hardware, SmartBoard, Internet, Google Accounts, Drag and Drop Code Programs, Wix.com Account, Website Builder and PhotoShop for use to complete following projects- Wix.com Website, Scratch.MIT, and Google Sites

Alignment to 21st Century Skills & Technology

CRP.K-12.CRP2.1	Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.
CRP.K-12.CRP4.1	Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.
CRP.K-12.CRP7.1	Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.
CRP.K-12.CRP10.1	Career-ready individuals take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals.
CRP.K-12.CRP12.1	Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.
CAEP.9.2.12.C.1	Review career goals and determine steps necessary for attainment.
CAEP.9.2.12.C.2	Modify Personalized Student Learning Plans to support declared career goals.
CAEP.9.2.12.C.4	Analyze how economic conditions and societal changes influence employment trends and future education.
CAEP.9.2.12.C.5	Research career opportunities in the United States and abroad that require knowledge of world languages and diverse cultures.
CAEP.9.2.12.C.6	Investigate entrepreneurship opportunities as options for career planning and identify the knowledge, skills, abilities, and resources required for owning and managing a business.
CAEP.9.2.12.C.7	Examine the professional, legal, and ethical responsibilities for both employers and employees in the global workplace.
CAEP.9.2.12.C.8	Assess the impact of litigation and court decisions on employment laws and practices.

21st Century Skills/Interdisciplinary Themes

- Communication and Collaboration
- Creativity and Innovation
- Critical thinking and Problem Solving
- ICT (Information, Communications and Technology) Literacy
- Information Literacy
- Life and Career Skills
- Media Literacy

21st Century Skills

- Civic Literacy
- Environmental Literacy
- Financial, Economic, Business and Entrepreneurial Literacy
- Global Awareness
- Health Literacy

Differentiation

-Students will work in small groups to complete review of all websites and coding activities

-A video/oral presentation will be created and uploaded onto google classroom based on how to use dashboard in Wix.com

Differentiations:

- Small group instruction
- Small group assignments
- Extra time to complete assignments
- Pairing oral instruction with visuals
- Repeat directions
- Use manipulatives
- Center-based instruction
- Token economy
- Study guides
- Teacher reads assessments allowed
- Scheduled breaks
- Rephrase written directions

- Multisensory approaches
- Additional time
- Preview vocabulary
- Preview content & concepts
- Story guides
- Behavior management plan
- Highlight text
- Student(s) work with assigned partner
- Visual presentation
- Assistive technology
- Auditory presentations
- Large print edition
- Dictation to scribe
- Small group setting

Hi-Prep Differentiations:

- Alternative formative and summative assessments
- Choice boards
- Games and tournaments
- Group investigations
- Guided Reading
- Independent research and projects
- Interest groups
- Learning contracts
- Leveled rubrics
- Literature circles
- Multiple intelligence options
- Multiple texts
- Personal agendas
- Project-based learning
- Problem-based learning
- Stations/centers
- Think-Tac-Toes
- Tiered activities/assignments
- Tiered products
- Varying organizers for instructions

Lo-Prep Differentiations

- Choice of books or activities
- Cubing activities
- Exploration by interest
- Flexible grouping
- Goal setting with students
- Jigsaw
- Mini workshops to re-teach or extend skills
- Open-ended activities
- Think-Pair-Share
- Reading buddies
- Varied journal prompts
- Varied supplemental materials

Special Education Learning (IEP's & 504's)

-Students will be given additional time to understand the process of coding and creating music based websites

-Printed copy of notes for all add-ons and projects with in Wix.com and Scratch

- printed copy of board work/notes provided
- additional time for skill mastery
- assistive technology
- behavior management plan
- Center-Based Instruction
- check work frequently for understanding
- computer or electronic device utilizes
- extended time on tests/ quizzes
- have student repeat directions to check for understanding
- highlighted text visual presentation
- modified assignment format
- modified test content
- modified test format
- modified test length
- multiple test sessions
- multi-sensory presentation
- preferential seating
- preview of content, concepts, and vocabulary
- Provide modifications as dictated in the student's IEP/504 plan
- reduced/shortened reading assignments
- Reduced/shortened written assignments
- secure attention before giving instruction/directions
- shortened assignments

- student working with an assigned partner
- teacher initiated weekly assignment sheet
- Use open book, study guides, test prototypes

English Language Learning (ELL)

-Student will be assisted by peers, fluent in native language to understand all parts and pages of a website

-Students will be allowed to correct all errors until students become proficient in the use of dashboard for the website

- teaching key aspects of a topic. Eliminate nonessential information
- using videos, illustrations, pictures, and drawings to explain or clarify
- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning;
- allowing students to correct errors (looking for understanding)
- allowing the use of note cards or open-book during testing
- decreasing the amount of work presented or required
- having peers take notes or providing a copy of the teacher's notes
- modifying tests to reflect selected objectives
- providing study guides
- reducing or omitting lengthy outside reading assignments
- reducing the number of answer choices on a multiple choice test
- tutoring by peers
- using computer word processing spell check and grammar check features
- using true/false, matching, or fill in the blank tests in lieu of essay tests

At Risk

-Students will be given option to use illustrations or video lessons for website builder

-Students will select their own website idea for the creation process and dashboard control

- allowing students to correct errors (looking for understanding)
- teaching key aspects of a topic. Eliminate nonessential information
- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning
- allowing students to select from given choices
- allowing the use of note cards or open-book during testing
- collaborating (general education teacher and specialist) to modify vocabulary, omit or modify items to reflect objectives for the student, eliminate sections of the test, and determine how the grade will be determined prior to giving the test.
- decreasing the amount of work presented or required
- having peers take notes or providing a copy of the teacher's notes
- marking students' correct and acceptable work, not the mistakes
- modifying tests to reflect selected objectives
- providing study guides
- reducing or omitting lengthy outside reading assignments
- reducing the number of answer choices on a multiple choice test
- tutoring by peers
- using authentic assessments with real-life problem-solving
- using true/false, matching, or fill in the blank tests in lieu of essay tests
- using videos, illustrations, pictures, and drawings to explain or clarify

Talented and Gifted Learning (T&G)

-Students will be given an advanced list of coding guidelines to complete at faster pace

-Students will troubleshoot any and all issues that arise when operating Google sites or Wix.com dashboard manager

- Above grade level placement option for qualified students
- Advanced problem-solving
- Allow students to work at a faster pace
- Cluster grouping
- Complete activities aligned with above grade level text using Benchmark results
- Create a blog or social media page about their unit
- Create a plan to solve an issue presented in the class or in a text
- Debate issues with research to support arguments
- Flexible skill grouping within a class or across grade level for rigor
- Higher order, critical & creative thinking skills, and discovery
- Multi-disciplinary unit and/or project
- Teacher-selected instructional strategies that are focused to provide challenge, engagement, and growth opportunities
- Utilize exploratory connections to higher-grade concepts

- Utilize project-based learning for greater depth of knowledge

Sample Lesson

Using the template below, please develop a **Sample Lesson** for the first unit only.

Unit Name:

NJSLS:

Interdisciplinary Connection:

Statement of Objective:

Anticipatory Set/Do Now:

Learning Activity:

Student Assessment/CFU's:

Materials:

21st Century Themes and Skills:

Differentiation/Modifications:

Integration of Technology: