Curriculum: Web Design I

Curricular Unit: Development of a Website

Instructional Unit: A. Develop and edit a website using cascading style sheets (CSS)

Standard Alignments (Section 2)

VACLE: PP.1.C (Levels 2,4) Knowledge: (CA) 1,3,5 (FA) 1,3 CCSS: 11-12.W.5; 11-12.RST.3 NETS: 1a; 3b,c; 4b; 6a-c Performance: 1.4, 1.5, 1.8, 1.10, 2.2, 3.2, 3.5

Unit (Section 3)

Learning Targets:

- **Create a style sheet**

- **Attach a style sheet to a file**

- **Effectively use a style sheet to control page elements**

- **Identify and implement common style sheet tags**

- **Identify the proper file extension for a style sheet**

- Utilize online and technical print resources to define terms related to cascading style sheets and utilize them in context-specific situations

Instructional Strategies:

- Guided practice to demonstrate software:
  - capabilities
  - modeling
  - quality vs. unacceptable work
- Independent practice to give students opportunities to create samples of quality work
- Differentiated instruction for:
  - visual learners
  - auditory learners
  - one-on-one instruction
- Academic labs available to give individual assistance to students:
  - with makeup work
  - who need reinforcement

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- Small group discussions to:
  - determine relevance of news stories
  - offer feedback
- Online software tutorials to learn specific editing skills to a specific project
- Hands-on demonstrations with equipment to ensure student understanding of operations and safety
- Business partners/guest speakers to relate real-world job assignments to classroom instruction
- Formative feedback to:
  - give positive feedback and suggestions for improvement
  - clarify expectations

Assessments/Evaluations:

- Formative:
  - Digital and/or written quizzes to check comprehension and retention
  - Q&A
  - Pair share
  - Teacher:
    - guidance
    - monitoring
    - feedback
- Summative:
  - Written assessment
  - Production assessment

Sample Assessment Questions:

- The file extension for a web page file is:
  a. .jpeg
  b. .css
  c. .html
  d. .psd
- Describe why a designer would benefit from using a Cascading Style Sheet (.css) when developing a web site?

Instructional Resources/Tools:

- Technical manuals/textbooks
- Online resources
- Adobe Editing Suite
- www.codecademy.com

Cross Curricular Connections:

- ELA:
  - Reading
  - Writing
  - Language
  - Speaking and listening
- Visual Arts

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DOK: 3

Curriculum: Web Design I

Curricular Unit: Development of a Website

Instructional Unit: B. Develop and edit a website using hyper-text markup language (HTML)

Standard Alignments (Section 2)

VAGLE: PP.1.C (Levels 2,4)
Knowledge: (CA) 1,3,5 (FA) 1
CCSS: 11-12W.5; 11-12.RST.3
NETS: 1a; 3b,c; 4b; 6a-c
Performance: 1.4, 1.5, 1.8, 1.10, 2.2, 3.5

Unit (Section 3)

Learning Target

- **Identify and effectively utilize common HTML tags**

- Create and edit a table

- **Create and edit hyperlinks**

- **Properly utilize and identify serif vs. san serif font usage**

- Create and edit library items

- **Properly identify and incorporate meta data**

- **Utilize techniques to add images**

- **Utilize techniques to align images**

- Utilize techniques to tag images

- Create and edit a navigation system

- **Utilize techniques to apply color changes**

- **Utilize techniques to apply horizontal rules**

- Create and edit email links

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Instructional Strategies:

- Guided practice to demonstrate software:
  - capabilities
  - modeling
  - quality vs. unacceptable work
- Independent practice to give students opportunities to create samples of quality work
- Differentiated instruction for:
  - visual learners
  - auditory learners
  - one-on-one instruction
- Academic labs available to give individual assistance to students:
  - with makeup work
  - who need reinforcement
- Small group discussions to:
  - determine relevance of news stories
  - offer feedback
- Online software tutorials to learn specific editing skills to a specific project
- Hands-on demonstrations with equipment to ensure student understanding of operations and safety
- Business partners/guest speakers to relate real-world job assignments to classroom instruction
- Formative feedback to:
  - give positive feedback and suggestions for improvement
  - clarify expectations

Assessments/Evaluations:

- Formative:
  - Digital and/or written quizzes to check comprehension and retention
  - Q&A
  - Pair share
  - Teacher:
    - guidance
    - monitoring
    - feedback
- Summative:
  - Written assessment
  - Production assessment

Sample Assessment Questions:

- What benefit does a library item have when designing web pages?
- Describe a scenario when using a library item would be beneficial.
- What does HTML stand for?
  a. Home Tool Markup Language
  b. Hyper Text Markup Language
  c. Hyperlinks and Text Markup Language
- What is the correct code to end a web page title?
  a. </div>
  b. </title>
  c. </html>
  d. </h1>

Instructional Resources/Tools:

- Technical manuals/textbooks
- Online resources
- Adobe Editing Suite
- www.codecademy.com

Cross Curricular Connections:

- ELA:
  - Reading
  - Writing
  - Language
  - Speaking and listening
- Visual Arts

Depth of Knowledge (Section 5)

DOK: 3

Curriculum: Web Design I

Curricular Unit: Development of a Website

Instructional Unit: C. Develop a website through effective planning, design and execution

Standard Alignments (Section 2)

VAGLE: PP.1.C (Levels 2,4)
Knowledge: (CA) 1,3,5 (FA) 1-3
CCSS: 11-12.RI.7; 11-12.W.6; 11-12.RST.7; 11-12.RST.9
NETS: 1a, 3b,c; 4b; 6a-c
Performance: 1.4, 1.5, 1.8, 1.10, 2.2, 3.5

Unit (Section 3)

Learning Targets:

- **Identify a website's target audience and purpose**

- **Develop a storyboard with layout showing essential web page elements (navigation, banner, contact information, white space)**

- **Create a website that demonstrates consistency throughout its appearance**

- **Participate in self-critiquing and peer-critiquing**

- Define social media and discuss the importance and how it is to be used properly

- **Maintain effective organization (root folder, assets folder, unnecessary files)**

- Develop website that demonstrates compatibility with browsers

- **Create and maintain working hyperlinks with proper targets (open in new window, open within the website)**

- Create and maintain an assets folder

- **Create a root folder ready for publishing (with all unnecessary files removed)**

Instructional Strategies:

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- Guided practice to demonstrate software:
  - capabilities
  - modeling
  - quality vs. unacceptable work
- Independent practice to give students opportunities to create samples of quality work
- Differentiated instruction for:
  - visual learners
  - auditory learners
  - one-on-one instruction
- Academic labs available to give individual assistance to students with makeup work or reinforcement
- Small group discussions to:
  - determine relevance of news stories
  - offer feedback
- Online software tutorials to learn specific editing skills to a specific project
- Hands-on demonstrations with equipment to ensure student understanding of operations and safety
- Business partners/guest speakers to relate real-world job assignments to classroom instruction
- Formative feedback to give positive feedback and suggestions for improvement, or to clarify expectations

Assessments/Evaluations:

- Formative:
  - Digital and/or written quizzes to check comprehension and retention
  - Q&A
  - Pair share
  - Teacher:
    - guidance
    - monitoring
    - feedback
- Summative:
  - Written assessment
  - Production assessment

Sample Assessment Questions:

- Why is it important for a designer to utilize a storyboard before creating a website?
- Why is file maintenance important for a web designer in the digital world?
- Moving from computer to computer (or site to site) requires you to define your site. Describe what it means for someone to define his or her site on a new computer. Explain what information is needed to properly define your site.

Instructional Resources/Tools:

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• Technical manuals/textbooks
• Online resources
• Computer software:
   • Adobe Editing Suite
   • Microsoft Word
   • Paint

Cross Curricular Connections:
 	
• ELA:
   • Reading
   • Writing
   • Language
   • Speaking and listening
• Visual Arts

Depth of Knowledge (Section 5)

DOK: 3

Curriculum: Web Design I

Curricular Unit: Image Creation and Editing

Instructional Unit: D. Utilize available resources to create a digital image

Standard Alignments (Section 2)

VAGLE: PP.1.C (Levels 2,4); PP.3.B (Levels 3,4)
Knowledge: (CA) 1,3,6 (FA) 1,2,5,6
CCSS: 11-12.RST.3
NETS: 1a; 3b,c; 4b; 6a-c
Performance: 1.4, 1.5, 1.8, 1.10, 2.2, 3.5

Unit (Section 3)

Learning Targets:

- **Properly create an image with an appropriate image size**

- **Create an image in the proper color mode based on the intended use**

- **Create a digital image using the optimal resolution**

- **Remove an image's background layer to enable editing**

- **Identify proper digital image file format**

- **Import web images and graphics**

- **Effectively use layers to edit digital images**

- Utilize online and technical print resources to define terms related to creating digital images and utilize them in context specific situations

Instructional Strategies:

- Guided practice to demonstrate software:
  - capabilities
  - modeling
  - quality vs. unacceptable work
- Independent practice to give students opportunities to create samples of quality work
- Differentiated instruction for:
  - visual learners
  - auditory learners
  - one-on-one instruction
- Academic labs available to give individual assistance to students with makeup work or reinforcement

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- Small group discussions to:
  - determine relevance of news stories
  - offer feedback
- Online software tutorials to learn specific editing skills to a specific project
- Hands-on demonstrations with equipment to ensure student understanding of operations and safety
- Business partners/guest speakers to relate real-world job assignments to classroom instruction
- Formative feedback to give positive feedback and suggestions:
  - for improvement
  - to clarify expectations

Assessments/Evaluations:

- Formative:
  - Digital and/or written quizzes to check comprehension and retention
  - Q&A
  - Pair share
  - Teacher:
    - guidance
    - monitoring
    - feedback
- Summative:
  - Written assessment
  - Production assessment

Sample Assessment Questions:

- If you intend to print an image from Photoshop, the color mode you should select is:
  a. CMYK
  b. RGB
  c. bitmap
  d. grayscale
- If you intend to use an image only on the computer, the color mode you should select is:
  a. CMYK
  b. RGB
  c. bitmap
  d. grayscale
- What is a pixel? Describe what a pixel is and why you would need to know how many pixels to use when designing an image in Photoshop?
- The file extension for Photoshop files is _____.
- How do you save/use graphic files from the Internet properly?

Instructional Resources/Tools:

- Technical manuals/textbooks
- Online resources
- Adobe Editing Suite

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Cross Curricular Connections:

- ELA:
  - Reading
  - Writing
  - Language
  - Speaking and listening
- Visual Arts

Depth of Knowledge (Section 5)

DOK: 4

Curriculum: Web Design I

Curricular Unit: Image Creation and Editing

Instructional Unit: E. Utilize available resources for editing an image

Standard Alignments (Section 2)

VAGLE: PP.1.C (Levels 2,4); PP.3.B (Levels 3,4)
Knowledge: (CA) 1,3,5,6 (FA) 1,2,5
CCSS: 11-12.W.6
NETS: 1a; 3b,c; 4b; 6a-c
Performance: 1.4, 1.5, 1.8, 1.10, 2.2, 3.2, 3.5

Unit (Section 3)

Learning Targets:

- **Utilize available software tools to properly select objects**

- Demonstrate the ability to add fill and gradients to images

- Demonstrate the ability to effectively filters when editing an image

- Demonstrate the ability to effectively transparency when editing an image

- Explain the significance of destructive vs. non-destructive changes made to images

- Effectively edit layers' names and ordering

- **Utilize cropping techniques to images elements when editing**

- Utilize online and technical print resources to define terms related to editing digital images and utilize them in context specific situations

Instructional Strategies:

- Guided practice to demonstrate software:
  - capabilities
  - modeling
  - quality vs. unacceptable work
- Independent practice to give students opportunities to create samples of quality work
- Differentiated instruction for:
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  - auditory learners
  - one-on-one instruction
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- Small group discussions to:
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  - offer feedback
- Online software tutorials to learn specific editing skills to a specific project
- Hands-on demonstrations with equipment to ensure student understanding of operations and safety
- Business partners/guest speakers to relate real-world job assignments to classroom instruction
- Formative feedback to:
  - give positive feedback and suggestions for improvement
  - clarify expectations

Assessments/Evaluations:

- Formative:
  - Digital and/or written quizzes to check comprehension and retention
  - Q&A
  - Pair share
  - Teacher:
    - guidance
    - monitoring
    - feedback
- Summative:
  - Written assessment
  - Production assessment

Sample Assessment Questions:

- What does it mean to flatten an image? What does it do to a Photoshop image file?
- What is the advantage of using layers in Photoshop?
- Why is it important to remove the lock from a background layer?

Instructional Resources/Tools:

- Technical manuals/textbooks
- Online resources
- Adobe Editing Suite

Cross Curricular Connections:

- ELA:
  - Reading
  - Writing
  - Language
  - Speaking and listening
- Visual Arts

Depth of Knowledge (Section 5)

DOK: 3

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Curriculum: Web Design I

Curricular Unit: Image Creation and Editing

Instructional Unit: F. Properly prepare images for use on the web

Standard Alignments (Section 2)

VAGLE: PP.1.C (Level 2,4); PP.3.B (Level 3,4)
Knowledge: (CA) 1,3,5,6 (FA) 1
CCSS: 11-12.RST.3
NETS: 1a,b; 3c; 4b; 6a-c
Performance: 1.4, 1.5, 1.8, 1.10, 2.2, 3.2, 3.5

Unit (Section 3)

Learning Targets:

- **Identify proper download time and make necessary adjustments to maintain optimal download speed**

- **Identify proper resolution and make necessary adjustments to maintain optimal image resolution**

- **Identify proper color modes for use on printing or web-based**

- **Identify proper image file formats**

- **Identify proper image size**

- **Identify proper image quality as seen on screen**

- Utilize online and technical print resources to define terms related to preparing images for use on the web and utilize the terms in context specific situations

Instructional Strategies:

- Guided practice to demonstrate software:
  - capabilities
  - modeling
  - quality vs. unacceptable work
- Independent practice to give students opportunities to create samples of quality work
- Differentiated instruction for:
  - visual learners
  - auditory learners
  - one-on-one instruction
- Academic labs available to give individual assistance to students with makeup work or reinforcement

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• Small group discussions to:
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• Online software tutorials to learn specific editing skills to a specific project
• Hands-on demonstrations with equipment to ensure student understanding of operations and safety
• Business partners/guest speakers to relate real-world job assignments to classroom instruction
• Formative feedback to:
  • give positive feedback and suggestions for improvement
  • clarify expectations

Assessments/Evaluations:
 	
• Formative:
  • Digital and/or written quizzes to check comprehension and retention
  • Q&A
  • Pair share
  • Teacher:
    • guidance
    • monitoring
    • feedback
• Summative:
  • Written assessment
  • Production assessment

Sample Assessment Questions: • How do you save/use graphic files from the Internet properly? • What are 3 of the possible steps you could take to get an image web-ready (optimized)? • Explain when you would save an image in RGB mode vs. CMYK mode?
Instructional Resources/Tools: • Technical manuals/textbooks • Online resources • Adobe Editing Suite

Cross Curricular Connections:
 	
• ELA:
  • Reading
  • Writing
  • Language
  • Speaking and listening
• Visual Arts

Depth of Knowledge (Section 5)

DOK: 3

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