#### **COURSE TITLE**

Web Page Design

#### **LENGTH**

One Semester Grades 10-12

#### **DEPARTMENT**

Business Education Barbara O'Donnell, Supervisor

#### **SCHOOL**

Rutherford High School

#### **DATE**

September 10, 2018

#### WEB PAGE DESIGN

#### I. Introduction/Overview/Philosophy

This course is designed to introduce and enhance student knowledge of web page design. The course will include instruction in designing web pages through the use of HTML programming, JavaScript programming, and web design software. In addition, instruction in graphic animation will be covered.

This course will also include discussions of the Internet, how it originated, how it functions, as well as the advantages, disadvantages, and dangers associated with Internet use. It will also help to develop and refine students' Internet searching skills through instruction on various searching methods and Internet resources.

During the course, the problems and challenges presented to students will be assigned tasks and/or student-defined problems. Students will be required to research topics in order to develop sophisticated and informative web pages. Students will decide on the type and the function of their web sites and will be exposed to and required to use various types of web technologies such as image maps, image rollovers, linking, animation, scripting and Cascading Style Sheet layouts (CSS). Students will also be required to produce a storyboard of their pages in order to fully grasp navigation and design concepts. These assignments will result in the extensive utilization of the Internet in problem solving and information gathering.

Web Page Design is intended for all students, because it is imperative that all students build a solid understanding of using information on and designing information for the Internet in order to compete in the digital world in which they live and will contribute to in the new electronic learning environment and the larger online world. It will lay the groundwork for students to be able to use the Internet as an extraordinary source and communication vehicle of information in all their course work.

#### II. Objectives

#### Course Outline:

- A. Internet History
  - 1. Develop a timeline of historical events related to the Internet
  - 2. Understand web addressing
  - 3. Understand how a network operates
  - 4. Study current events related to the global impact of advances in computer science
- B. Internet Searching
  - 1. Distinguish among subject guides, search engines, and metasearch engines
  - 2. Use Boolean operators
  - 3. Understand algorithms/computational thinking as related to web searching and problem solving
  - 4. Explain how search engines, subject guides, and metasearch engines categorize and discover information (spiders and robots)
  - 5. Determine reliability of information
  - 6. Develop an understanding of copyright laws and proper citation for the use of copyrighted material
- C. Ethical and Legal Issues in Web Development
  - 1. Distinguish between legal and ethical issues

- 2. Use web content responsibly, legally and ethically
- 3. Understand end-user privacy issues and privacy disclaimers

#### D. Cybersecurity

- 1. Understand how encryption works to protect privacy
- 2. Research recent network security breaches and how to defend against them
- 3. Analyze hacking techniques and explore a hacker's methodology

#### E. Web Page Development

- 1. Develop a publishing plan
  - a. Develop a purpose statement
  - b. Use storyboarding techniques
  - c. Create a flow chart (site map) of their pages including all links
- 2. Understand Web architecture
  - a. Create a single page
  - b. Create a web site
  - c. Name pages correctly (index.html, habitat.html, etc.)

#### F. HTML

- 1. Uncover the page beneath the Web page (source code)
- 2. Use correct starting and ending tags
- 3. Save and view an HTML file in a web browser
- 4. Use HTML headings
- 5. Use HTML numbered and bulleted lists with attributes
- 6. Use HTML single and double spacing (break and paragraph)
- 7. Use HTML spacing techniques
- 8. Incorporate horizontal rules with attributes
- 9. Enhance pages with background colors/images (properly edited)
- 10. Add hyperlinks—to URLs, to other pages in the same web site, and internal links
- 11. Use font size, style and color
- 12. Download and insert graphics (properly edited)
- 13. Size pictures using HTML and Photoshop techniques
- 14. Organize and display information using tables

#### G. Color

- 1. Understand the importance of color
- 2. Use online resources to determine color combinations
- 3. Use hexadecimal numbers in choosing color

#### H. Web Graphics

- 1. Overview of web graphics
  - a. Sources of graphics
    - i. Use of online sources
    - ii. Use of digital cameras
    - iii. Use of scanners
  - b. File formats
    - i. Bitmap
    - ii. Vector graphics
    - iii. GIF
    - iv. JPEG
    - v. PNG
    - vi. TIFF
- 2. Editing graphics using various software such as Adobe Photoshop and iPhoto

- a. Resizing
- b. Color correction
- c. Cropping
- d. Background transparency
- e. Reformatting to lower bandwidth needs
- 3. Create graphics
  - a. GIF
  - b. JPEG
  - c. PNG
  - d. Vector based (Illustrator or Flash)
  - e. Background graphics
- 4. Animate graphics
  - a. Adobe Flash/Adobe Animate CC or similar program
    - i Basics
      - 1. Create a movie file
      - 2. Set movie properties
      - 3. Enter content on the stage
      - 4. Draw, select, position object on the stage
      - 5. Modify and copy stroke and fill settings
      - 6. Rotate, skew, scale, resize, flip and reshape objects
      - 7. Understand segments and overlaps
      - 8. Group and ungroup objects
    - i. Create A Movie
      - 1. Work with frames and keyframes
      - 2. Understand and work with layers
      - 3. Create and edit symbols
      - 4. Modify instances
      - 5. Create buttons
      - 6. Understand tweening
        - a) Motion tweening
        - b) Tweening the color of an instance
        - c) Shape tweening
        - d) Tween motion along a path
    - i. Enhancing a Movie
      - a) Import graphics
      - b) Insert sounds
      - c) Create, enter, edit format, and transform text
      - d) Animate text blocks
    - i. Export Flash files (create swf file)
- I. Use Web Design Software
  - 1. Incorporate all techniques learned in HTML
  - 2. Design image maps
  - 3. Create pop-up menus (using SPRY)
  - 4. Use Cascading Style Sheets (CSS) as a site layout technique for easy editing
  - 5. Create multi-page sites
  - 6. Use tables to display data
  - 7. Use tables as a page layout technique
  - 8. Link pages

- 9. Create image rollovers
- 10. Design ordered and unordered lists
- 11. Create and insert an animated movie
- J. JavaScript Introduction
  - 1. Understand JavaScript basics
  - 2. Use conditional statements
- K. JavaScript and Images
  - 1. Create an image and/or hypertext rollover/mouseover
  - 2. Create a cycling banner
  - 3. Locate and insert Javascript found on the Internet

#### Student Outcomes:

After successfully completing this course, the student will demonstrate the ability to:

- recount a brief history of the Internet.
- explain the parts of an Internet address.
- explain the parts of a network and why we use a network.
- distinguish among search engines, subject guides, and metasearch engines.
- utilize various search techniques.
- describe the processes and approaches drawn on when solving problems and/or developing code
- understand copyright issues on the Web.
- define ethics, distinguish between legal and ethical issues
- describe how encryption works to protect privacy
- describe recent network security breaches and how companies defend against them
- explain why the term "hacker" is extremely flexible and describe the variety of roles hackers play
- use text, graphics and code properly
- use strategies to avoid violating end-user trust
- develop privacy disclaimers appropriate to site purpose and audience
- determine when and why web sites are created.
- identify HTML starting tags.
- save HTML documents properly.
- integrate levels of headings into Web pages.
- create unordered and ordered lists.
- organize web page information with single and double spacing.
- organize web page information with blockquote and proper spacing.
- organize page information with horizontal rules.
- implement attributes and values.
- change Web page color defaults by altering attributes and values.
- alter text colors.
- understand the effects of color.
- create three types of hyperlinks: to another spot within a page, to a URL on the web, to another self-created web page.
- control the size, style, and color of fonts.
- download pictures from the Web.
- edit graphics in Photoshop.
- insert graphics into self-created Web pages.

- create image maps.
- change the size of graphics.
- understand the basics of creating an animation.
- use tables to organize information.
- use a table to layout a page or a site.
- turn pictures into hyperlinks.
- understand the purpose of JavaScript.
- create an image rollover and/or hypertext rollover using JavaScript.
- create a cycling banner using JavaScript.
- create various web pages and web sites incorporating HTML, JavaScript, and animation techniques.
- understand the importance of storyboarding and be able to create a usable storyboard.
- understand the importance of a site map and be able to create a useable site map and link it to a web page.

#### NJ Student Learning Standards

#### **CAREER READY PRACTICES**

#### CRP2. Apply appropriate academic and technical skills.

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

#### CRP4. Communicate clearly and effectively and with reason.

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.

#### CRP5. Consider the environmental, social and economic impacts of decisions.

Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization.

#### CRP6. Demonstrate creativity and innovation.

Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.

#### CRP7. Employ valid and reliable research strategies.

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.

#### CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.

#### CRP11. Use technology to enhance productivity.

Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent riskspersonal and organizational-of technology applications, and they take actions to prevent or mitigate these risks.

#### CRP12. Work productively in teams while using cultural global competence.

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.

#### **TECHNOLOGY**

# STANDARD 8.1: EDUCATIONAL TECHNOLOGY: ALL STUDENTS WILL USE DIGITAL TOOLS TO ACCESS, MANAGE, EVALUATE, AND SYNTHESIZE INFORMATION IN ORDER TO SOLVE PROBLEMS INDIVIDUALLY AND COLLABORATIVELY AND TO CREATE AND COMMUNICATE KNOWLEDGE.

- 8.1.12.A.2 Produce and edit a multi-page digital document for a commercial or professional audience and present it to peers and/or professionals in that related area for review.
- 8.1.12.D.1 Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.

### STANDARD 9.3: CAREER AND TECHNICAL EDUCATION INFORMAITON TECHNOLOGY CAREER CLUSTER

PATHWAY: WEB & DIGITAL COMMUNICATIONS (IT-WD)

- 9.3.IT-WD.2 Apply the design and development process to produce user-focused Web and digital communications solutions.
- 9.3.IT-WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.
- 9.3.IT-WD.5 Develop, administer and maintain Web applications.
- 9.3.IT-WD.6 Design, create and publish a digital communication product based on customer needs.
- 9.3.IT-WD.7 Evaluate the functionality of a digital communication product using industry accepted techniques and metrics.

9.3.IT-WD.10 Comply with intellectual property laws, copyright laws and ethical practices when creating Web/digital communications.

#### PATHWAY PRINTING TECHNOLOGY (AR-PRT)

9.3.12.AR-PRT.2 Demonstrate the production of various print, multimedia or digital media products.

#### III. Proficiency Levels

This course is open to grades 10–12. There are no prerequisites for this course.

#### IV. Methods of Assessment

#### **Student Assessment**

The teacher will provide a variety of assessments during the course of the year including but not limited to:

Hands-on exercises

Projects

Presentations

Quizzes/Tests

Classwork

Web pages may include but are not limited to the following:

- Web page containing bulleted and numbered lists; headings; spacing techniques; background, text, and font color.
- Web page containing items outlined above as well as hypertext links, font attributes and values, downloaded graphics, and tables.
- Web page containing self-made graphics, animation, image maps, and JavaScript.
- A project incorporating a variety of web page design techniques; project must be a school, community or non-profit related topic. Other suggestions are to create a training module, using interactive techniques, so as to create an online course or create a personal digital portfolio.

Evaluation of web pages will be completed through the use of comprehensive rubrics that assess students' knowledge of web design techniques and style.

#### **Curriculum/Teacher Assessment**

The teacher will provide the subject area supervisor with suggestions for changes on an ongoing basis.

#### V. Grouping

This course is open to all students with a desire to learn and expand their knowledge of web page design. There is no prerequisite to this course.

#### VI. Articulation/Scope & Sequence/Time Frame

Course length is one semester and is offered to students in grades 10-12.

#### VII. Resources

- A. Hardware
  - Computer with Internet access
  - Scanner
  - Digital camera

#### B. Software

- Word processing software
- Web design software
- Image manipulation software
- Animation software

#### C. Workbooks—includes but not limited to:

- Adobe Photoshop CS6, Classroom in a Book, The official training workbook from Adobe Systems, Copyright 2012
- Adobe Creative Suite 6, Design & Web Premium, Classroom in a Book, The official training workbook from Adobe Systems, Copyright 2013
- Adobe Flash CS3 REVEALED, Author Jim Shuman, Thomson Course Technology, a division of Thomson Learning, Inc. Copyright 2008
- *Adobe Dreamweaver CS3 REVEALED* by Sherry Bishop. Published by Thomson Course Technology, a division of Thomson Learning, Inc. 2011
- *The Web Collection CS3 REVEALED* by Sherry Bishop, Jim Shuman & Barbara M Waxer. Published by Thomson Course Technology, a division of Thomson Learning, Inc. 2008
- Adobe Flash CS4 REVEALED, Author Jim Shuman. Published by Delmar, Cengage Learning, Copyright 2010
- The Principles of Beautiful Web Design, by Joseph Beaird. Published by SitePoint. March 2007
- The CSS Anthology by Rachel Andrew. Published by SitePoint. September 2009
- Simply Javascript by Kevin Yank and Cameron Adams. Published by SitePoint. September 2007
- DreamWeaver CS3 by Tom Negrino and Dori Smith. Published by Peachpit Press 2007
- Sams Teach Yourself Adobe Flash CS3 Professional in 24 hours by Phillip Kerman. Published by Sams Publishing. 2007

#### D. Online Resources

Design Techniques

About.com: Web Design / HTML – Design Basics – Jennifer Kyrnin <a href="http://specials.about.com/service/newsletters/webdesign/1282640400.htm">http://specials.about.com/service/newsletters/webdesign/1280221200.htm</a> <a href="http://specials.about.com/service/newsletters/webdesign/1276592400.htm">http://specials.about.com/service/newsletters/webdesign/1276592400.htm</a>

Color:

Color, Contrast, and Dimension - ColorMaker by Sam Chaukri <a href="http://www.bagism.com/colormaker">http://www.bagism.com/colormaker</a>

Design/Tutorials - Webmonkey

http://www.webmonkey.com

Lynda.com (subscription)

http://www.adobe.com/designcenter/tutorials/

Photoshop

http://www.photoshop-tutorials-plus.com/

• Image Maps

http://webdesign.about.com/od/imagemaps/a/image\_maps\_negs.htm?nl=1

Backgrounds

http://bgpatterns.com/

www.bagism.com/colormaker

• HTML Tutorials – HTML Helper Ring - Richard Gerald Lowe Jr.

http://www.html-helper.net/

Copyright

What is copyright?

http://www.teachingcopyright.org/

http://www.eff.org/

• Copyright friendly images/fonts

http://www.pics4learning.com/

http://free-clipart.net/

http://www.openfontlibrary.org

• CSS (Cascading Style Sheets)

http://webdesign.about.com/od/dreamweaverhowtos/ss/aadwcss.htm

• Web Portfolio Article

http://webdesign.about.com/od/jobs/a/aa102207.htm?nl=1

• NOVA Cybersecurity Lab - <a href="https://nj.pbslearningmedia.org/resource/nvcy-doc-cyberlplan/nova-cybersecurity-lab-lesson-plan/#.Wx6WYjNKjBJ">https://nj.pbslearningmedia.org/resource/nvcy-doc-cyberlplan/nova-cybersecurity-lab-lesson-plan/#.Wx6WYjNKjBJ</a>

#### VIII. Suggested Activities

The instructor will present and assign a variety of projects incorporating the use of various aspects of web page design concepts. Projects should focus on school and/or community-based topics.

#### IX. Methodologies

The following methods of instruction are suggested: lecture, demonstration, practice projects, heterogeneous ability grouping, and individualized projects.

#### X. Interdisciplinary Connections

Web site projects will incorporate interdisciplinary study wherever possible (collaboration between web page students and students in other academic classes is stressed).

# XI. Differentiating Instruction for Students with Special Needs: Students with Disabilities, Students at Risk, English Language Learners, and Gifted & Talented Students

Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways as they celebrate students' prior knowledge. By providing appropriately challenging learning, teachers can maximize success for all students.

Differentiating in this course includes but is not limited to:

Differentiation for Support (ELL, Special Education, Students at Risk)

- Peer mentoring on problems
- Differentiated teacher feedback on assignments
- Re-teaching and review
- Guided note taking
- Multi-media approach to accommodating various learning styles
- Use of visual and multi-sensory formats
- Use of assisted technology
- Authentic assessments

#### Differentiation for Enrichment

- Topic selection by interest
- Elevated questioning techniques
- Adjusting the pace of lessons
- Higher-order thinking skills

#### XII. Professional Development

The teacher will continue to improve expertise through participation in a variety of professional development opportunities.

## XIII. Curriculum Map/Pacing Guide

Unit Topic	Time Allocated	Differentiating Instruction for Students with Disabilities, Students at Risk of School Failure, English Language Learners, & Gifted & Talented Students	Standards	Assessments
<ul> <li>Introduction to the Internet</li> <li>Internet history</li> <li>Technology timeline</li> <li>Web addressing</li> <li>Networking</li> <li>Effective Internet searching techniques <ul> <li>Subject guides</li> <li>Search engines</li> <li>Boolean operators</li> <li>Spiders and robots</li> <li>Metasearch engines</li> <li>Reliability of information</li> </ul> </li> <li>Proper filing of projects</li> <li>Copyright and proper citation</li> </ul>	1 week	<ul> <li>For Support:</li> <li>Re-teaching and review</li> <li>Guided note taking</li> <li>Authentic assessments</li> <li>For Enhancement:</li> <li>Elevated questioning techniques</li> <li>Adjusting the pace of lessons</li> <li>Higher-order thinking skills</li> </ul>	Standards: 8.1.12.D.1, 9.3.IT-WD.10	Formative Assessment: Internet History research and questions; Timeline  Summative Assessment: History Quiz
<ul> <li>Ethical and Legal Issues in Web</li> <li>Development</li> <li>Define ethics</li> <li>Ethical issue and the Web</li> <li>Legal issues and the Web</li> <li>Copyrights, trademarks and trade secrets</li> </ul>	1 week	<ul> <li>For Support:</li> <li>Re-teaching and review</li> <li>Guided note taking</li> <li>Authentic assessments</li> <li>For Enhancement:</li> <li>Elevated questioning techniques</li> <li>Adjusting the pace of lessons</li> <li>Higher-order thinking skills</li> </ul>	Standards: CRP2, CRP4, CRP7, CRP11, 8.1.12.D.1, 9.3.IT-WD.10	Formative Assessment: Pre-assessment questions, Quiz on terms  Summative Assessment: Case Study: Steal This Site! Application Project: Visit sites and find sites' terms of use and privacy policies and answer questions.

Unit Topic	Time Allocated	Differentiating Instruction for Students with Disabilities, Students at Risk of School Failure, English Language Learners, & Gifted & Talented Students	Standards	Assessments
Cybersecurity & Global Impact of Advances in CS  Explore digital issues Recognize cyber scams Describe how encryption works to protect privacy Analyze reports of unfolding security breaches and apply their understanding of security networks to them Current Events (continuous throughout course)	1 week	For Support:  Re-teaching and review Guided note taking Authentic assessments  For Enhancement: Elevated questioning techniques Adjusting the pace of lessons Higher-order thinking skills	Standards: CRP2, CRP4, CRP6, CRP8, CRP12, 8.1.12.D.1, 9.3.IT-WD.10,	Formative Assessment: Present a current news story about a computing innovation; ask the students what they think about it, what computer science concepts are involved, and what the positive and negative implications are.  Maze game - navigating a robot.  Summative Assessment: Social Engineering Challenge - distinguish between phishing attempts, fraudulent websites, and phone scammers, Password-Cracking Challenge
<ul> <li>HTML programming</li> <li>Backbone of web page         <ul> <li>Heading tags</li> <li>Numbered and bulleted lists</li> <li>Table tags</li> <li>Line and paragraph spacing</li> <li>Text colors, sizes and fonts</li> <li>Background colors and images</li> <li>Horizontal rules</li> <li>External links</li> </ul> </li> <li>Linking pages</li> <li>Inserting graphics</li> </ul>	9 weeks	<ul> <li>For Support:</li> <li>Peer mentoring on problems</li> <li>Differentiated teacher feedback on assignments</li> <li>Re-teaching and review</li> <li>Guided note taking</li> <li>Authentic assessments</li> </ul> For Enhancement: <ul> <li>Topic selection by interest</li> <li>Elevated questioning techniques</li> <li>Adjusting the pace of lessons</li> </ul>	Standards: CRP2, CRP6, CRP11, 8.1.12.D.1, 9.3.IT-WD.2, 9.3.IT-WD.5, 9.3.IT-WD.10	Formative Assessment: Create one web page using HTML programming; Create a class schedule and calendar using tables;  Summative Assessment: HTML 1 and 2 Quiz; Tables Quiz Benchmark: Create a multi- page web site using HTML programming (autobiography); Final HTML Project Create a web site about a pre-

Unit Topic	Time Allocated	Differentiating Instruction for Students with Disabilities, Students at Risk of School Failure, English Language Learners, & Gifted & Talented Students	Standards	Assessments
Formatting graphics				approved topic using all of the
o Size				HTML tags learned.
o Color				
o Fade/Transparency				
o Crop				
<ul> <li>Resolution</li> </ul>				
<ul> <li>Sources of graphics</li> </ul>				
<ul> <li>Online</li> </ul>				
<ul> <li>Digital</li> </ul>				
<ul> <li>Scanner</li> </ul>				
<ul> <li>Original animations</li> </ul>				
<ul> <li>Graphic file formats</li> </ul>				
<ul> <li>Bitmap</li> </ul>				
<ul> <li>Vector</li> </ul>				
• GIF				
• JPEG				
<ul> <li>TIFF</li> </ul>				
<ul><li>PNG</li></ul>				
• PSD				
<ul> <li>Peer code review</li> </ul>				

Unit Topic	Time Allocated	Differentiating Instruction for Students with Disabilities, Students at Risk of School Failure, English Language Learners, & Gifted & Talented Students	Standards	Assessments
Intro to Animation software (such as Adobe Flash/Adobe Animate CC)  Create a movie file and set properties  Enter content on the stage (text, graphics and drawings)  Select and position graphics  Modify drawings, using stroke and fill settings  Rotate, skew, scale, resize, flip and reshape objects  Use segments and overlaps to create objects  Create and edit symbols  Group and ungroup objects  Animate the movie  Work with frames, keyframes and layers  Create buttons using action scripts  Use tweening  Motion tweening  Motion tweening  Tweening the color  Motion guide  Insert sounds  Create, enter, edit, format and transform text  Animate text  Export files for publishing on the web	4 weeks	<ul> <li>Peer mentoring on problems</li> <li>Differentiated teacher feedback on assignments</li> <li>Re-teaching and review</li> <li>Guided note taking</li> <li>Authentic assessments</li> <li>For Enhancement:</li> <li>Topic selection by interest</li> <li>Elevated questioning techniques</li> <li>Adjusting the pace of lessons</li> </ul>	Standards: CRP2, 8.1.12.D.1, 9.3.IT-WD.4, 9.3.IT-WD.10, 9.3.12.AR-PRT.2	Formative Assessment: Flash Quiz; Basketball in Hoop animation; Rocket Ship Animation;  Summative Assessment: Garden Project – create flash animation with motion guide and symbols; Car Project – create a moving car with sound; Aquarium and Airplane project – make the fish swim and the airplane fly with multiple loops – use art deco tool.

Unit Topic	Time Allocated	Differentiating Instruction for Students with Disabilities, Students at Risk of School Failure, English Language Learners, & Gifted & Talented Students	Standards	Assessments
Intro to web design software (such as Adobe Dreamweaver/WordPress) Project 2  Research appropriate content and graphics to be used in site  Create all pages using a table layout  Incorporate the use of animation into site  Use advanced features of Design Software Flash text Image map	3 weeks	<ul> <li>For Support:</li> <li>Authentic assessments</li> <li>Peer mentoring on problems</li> <li>Differentiated teacher feedback on assignments</li> <li>Re-teaching and review</li> <li>For Enhancement:</li> <li>Topic selection by interest</li> <li>Elevated questioning techniques</li> <li>Adjusting the pace of lessons</li> </ul>	Standards: CRP4, CRP6, CRP8, CRP11, 8.1.12.D.1, 9.3.IT-WD.5, 9.3.IT-WD.6 9.3.IT-WD.7 9.3.IT-WD.10	Formative Assessment: Dreamweaver terms quiz; Graphic Elements Project  Summative Assessment: Benchmark – create a 4-page website utilizing all features learned (including image rollover, hotspots and inserting a swf file)
<ul> <li>Introduction to CSS Technology</li> <li>Notes on cascading style sheets</li> <li>Creating styles</li> <li>Setting up home page</li> <li>Applying CSS to a web document</li> </ul>	1 week	<ul> <li>For Support:</li> <li>Peer mentoring on problems</li> <li>Differentiated teacher feedback on assignments</li> <li>Re-teaching and review</li> <li>Authentic assessments</li> <li>For Enhancement:</li> <li>Topic selection by interest</li> <li>Elevated questioning techniques</li> <li>Adjusting the pace of lessons</li> </ul>	Standards: CRP4, CRP6, CRP8, CRP11, 8.1.12.D.1, 9.3.IT-WD.2, 9.3.IT-WD.4 9.3.IT-WD.5 9.3.IT-WD.7 9.3.IT-WD.7	Formative Assessment: CSS Quiz  Summative Assessment: Seasons Project – create a 1 page web page on one of the four seasons using Dreamweaver (or similar) and CSS