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| Computer Information Systems Web Design  |
| **Description**  The purpose of this course is to increase the understanding of technology and use of the Internet. Effective and efficient web pages need to be carefully planned in order to make them clear and attractive. In this course, students will be exposed to web page design through utilizing HTML and the Adobe Web Development Suite (Dreamweaver, Flash, Fireworks and Photoshop).  |
| **Course Overview** |
| **Course Goals**Students should:* Be able to describe different career opportunities in the internet industry.
* Be able to distinguish between a good and bad web site.
* Create a web page using HTML
* Be able to include and manipulate images in a web site
* Be able to create and include animation in a web site.
* Be able to create a web site using web development software.
 | **Essential Questions** * What education and background is required for a career in the computer industry?
* What components are involved in a web site and how do they work?
* How does graphics affect website design?
* What are the technologies used to create websites?
* How does one produce a website?
 | **Assessments**Common AssessmentsStudent Web Site ProjectsSkill AssessmentsProjects |
|  **Content Outline** Unit 1 – Careers in web development.Unit 2 – Understanding HTML basics and creating a web page in HTML.Unit 3 – Editing and Incorporating graphics into a web page using Adobe Fireworks/Photoshop software.Unit 4 – Create and edit computer animation using Adobe Flash.Unit 5 – Create full functioning web sites. | **Standards**[State of Connecticut Curriculum Frameworks](http://www.sde.ct.gov/sde/cwp/view.asp?a=2618&q=320866)Connecticut State Standards are met in the following areas: * Analyze elements of a problem to develop creative solutions.
* Create ideas, proposals, and solutions to problems
* Use information technology skills for lifelong learning.
* Design, develop, and deliver advanced web content and applications using web design programs.

21st Century Skills CrosswalkNational Business Education Association (NBEA) – Information Technology |

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| **Pacing Guide Semester 1** |
| 1st Marking Period  | 2nd Marking Period  |
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| Month 1 | Month 2 | Month 3 | Month 4 | Month 5 |

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| Unit 1Introduction to web site careers2 weeks | Unit 2 Creating a web page in HTML2 weeks | Unit 3 Editing and Incorporating graphics in a web site using Adobe Fireworks4 weeks | Unit 4 Creating and incorporating animation in a web site using Adobe Flash4 weeks | Unit 5Creating web sites using Adobe Dreamweaver software8 weeks |

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| **Unit** **1 - Introduction to computer careers, 2 weeks** [**top**](#_top)  |
| StandardsConnecticut State Standards are met in the following areas: * Analyze elements of a problem to develop creative solutions.
* Create ideas, proposals, and solutions to problems
* Use information technology skills for lifelong learning.
* Design, develop, and deliver advanced web content and applications using web design programs.

21st Century Skills Crosswalk1. Use real-world digital and other research tools to access, evaluate and effectively apply information appropriate for authentic tasks.2. Work independently and collaboratively to solve problems and accomplish goals.3. Communicate information clearly and effectively using a variety of tools/media in varied contexts for a variety of purposes.NBEA – Information TechnologyExplore positions and career paths in information technology. |
| **Unit Objectives**Students will be able to:* Define different careers associated with computers.
* Define the requirements and education necessary for these careers.
 | **Focus Questions*** What challenges do computer professionals face in today’s world?
* What will the computer industry look like in 10 years?
 | **Assessment**Introductory Summative Project |
| **Skill Objectives** Students will:* Use analytical skills and support conclusions with specificity.
* Access and research information using the Internet.
* Display creative thinking, problem solving, and decision making.
* Organize and maintain files.
* Use computers to process information.
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| **Technology Resources** * Computers
* Software: word processing, spreadsheet, presentation
* Projector or smart board
 | **Suggested Materials/Resources** * Online Career Databases
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| **Unit** **2 Creating a Web Page in HTML, 2weeks** [**top**](#_top) |
| **Standards****21st Century Skills Crosswalk**1. Use real-world digital and other research tools to access, evaluate and effectively apply information appropriate for authentic tasks.2. Work independently and collaboratively to solve problems and accomplish goals.3. Communicate information clearly and effectively using a variety of tools/media in varied contexts for a variety of purposes.**NBEA – Information Technology**1. Use various input technologies to enter and manipulate information appropriately.
2. Achievement Standard: Analyze and design information systems using appropriate development tools.
3. Design, develop, test, and implement programs.
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| **Unit Objectives**Students will be able to:* Use HTML Basics
* Use HTML organization techniques
 | **Focus Question*** What is HTML (HyperText Markup Language) and why is it important to know how to interpret it?
* Why are the HTML tags needed to create a web page?
 | **Assessments** * Written assessments
* Projects
 |
| **Skill Objectives** Students will:* Be able to create and test web page using HTML**.**
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| **Technology Resources** * Computers
* Software: word processing, spreadsheet, presentation
* Projector or Smart board
 | **Suggested Materials/Resources** Various online sitesText book  |

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| **Unit 3** **Editing and Incorporating Graphics in a Web Site Using Adobe Fireworks**[**top**](#_top) |
| **Standards****21st Century Skills Crosswalk**1. Use real-world digital and other research tools to access, evaluate and effectively apply information appropriate for authentic tasks.2. Work independently and collaboratively to solve problems and accomplish goals.3. Communicate information clearly and effectively using a variety of tools/media in varied contexts for a variety of purposes.**NBEA – Information Technology**1. Design, develop, test, and implement programs.
 |
| **Unit Objectives**Students will be able to:* Understand how to navigate around the Adobe Fireworks editor.
* Import, select and modify graphics.
* Add text and shapes to images.
* Work with layering and filtering to an image.
* Import images into a web site
 | **Focus Questions** * How does the Adobe Fireworks/ Photoshop editor edit images?
* What role does graphics play in the creation of a web site?
* Can there be too much graphics in a web site?
* How would text on an image enhance the image?
 | **Assessments** Written assessmentsProject |
| **Skill Objectives** Students will:* Work with layering and filtering to an image
* Import images into a web site
* Know how to adjust the color/brightness, cropping, editing image
* Add text and use filters such as (skew tool, distort tool, and the pen tool)
* Use shapes tools to create various objects
* Learn to use the Button symbol feature to create buttons with rollover
* Effects and pop-up menus for a webpage
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| **Technology Resources** * Computers
* Software: word processing, spreadsheet, presentation
* Projector or smart board
* Adobe Web Development Suite
 | **Suggested Materials/Resources** TextbookVarious internet web sites |

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| **Unit 4** – **Editing and Incorporating Animations Into a Web Site Using Adobe Flash** [**top**](#_top) |
| **Standards****21st Century Skills Crosswalk**1. Use real-world digital and other research tools to access, evaluate and effectively apply information appropriate for authentic tasks.2. Work independently and collaboratively to solve problems and accomplish goals.3. Communicate information clearly and effectively using a variety of tools/media in varied contexts for a variety of purposes.**NBEA – Information Technology**1. Design, develop, test, and implement programs
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| **Unit Objectives**Students will be able to:* Understand how to navigate around the Adobe Flash editor
* Drawing objects in Flash
* Working with symbols and interactivity
* Work with a timeline.
* Create a motion tween animation
 | **Focus Questions** * How does the Adobe flash editor create tween movies?
* Why are there flash objects added to a web site?
* How would symbols enhance a web site?
* Are all video movies on a timeline?
* What is the difference between fixed and tween animations?
 | **Assessments** * Written assessments
* Projects
 |
| **Skill Objectives** Students will:* Understand how to navigate around the Adobe Flash editor
* Drawing objects in Flash
* Working with symbols and interactivity
* Work with a timeline.
* Create a motion tween animation
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| **Technology Resources** * Computers
* Software: word processing, spreadsheet, presentation
* Projector or smart board
* Web Development Software
 | **Suggested Materials/Resources** TextbookVarious internet web sites |

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| **Unit 5** – **Creating and Editing Web Sites in Adobe Dreamweaver** [**top**](#_top) |
| **Standards****21st Century Skills Crosswalk**1. Use real-world digital and other research tools to access, evaluate and effectively apply information appropriate for authentic tasks.2. Work independently and collaboratively to solve problems and accomplish goals.3. Communicate information clearly and effectively using a variety of tools/media in varied contexts for a variety of purposes.**NBEA – Information Technology**1. Design, develop, test, and implement programs
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| **Unit Objectives**Students will be able to:* Understand how to navigate around the Adobe Dreamweaver editor
* Plan and set up web site
* Add folders and pages to create a website
* Create an index page
* Create links to internal and external pages
* Create and include a navigation bar on each page
 | **Focus Questions** * How does the Dreamweaver editor create web sites?
* Why do some web sites look better than others?
* Where is all the web site information stored?
* What is the main page on a web site called?
* How does one web site connect with another web site?
* How are web pages connected?
 | **Assessments** Written assessmentsProjects Student Web Site Project |
| **Skill Objectives** Students will:* Understand how to navigate around the Adobe Dreamweaver editor
* Plan and set up web site
* Add folders and pages
* Create an index page
* Create links to internal and external pages
* Create and include a navigation bar on each page
* Duplicate pages, add font, insert and align images
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| **Technology Resources** * Computers
* Software: word processing, spreadsheet, presentation
* Projector or smart board
* Web Development Software
 | **Suggested Materials/Resources** Text bookVarious internet web sites |