

DARIEN PUBLIC SCHOOLS  
CURRICULUM GUIDE

**Web Design**  
Grade 9-12  
Computer Studies

**APPROVED BY THE BOARD OF EDUCATION  
ON APRIL 26, 2011**

# DARIEN PUBLIC SCHOOLS

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## **DATES**

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## **SECTION I – Course Information**

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### **Statement of Philosophy – Darien Public Schools Computer Studies**

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Computer Studies Courses provide students with the opportunity to become knowledgeable about computers-their history, capabilities, functions and prospective uses. An additional purpose is to provide the opportunity for students to become versatile computer users and for some students to become proficient in a programming language. At the same time, developing and refining of computer skills, based on individual interests and abilities.

### **Program Goals**

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Upon completion of this course students should be able to demonstrate skills and knowledge in the following content standards:

- Define terms associated with the World Wide Web, HTML and emerging technologies.
- Demonstrate knowledge of the Internet and the various tools utilized including: Browsers, FTP clients, compression utilities, and file management.
- Demonstrate an understanding of basic Web design principles and structures.
- Demonstrate knowledge of how to design and create effective and structured Web pages using Dreamweaver, Fireworks, HTML, CSS and other emerging technologies.
- Demonstrate an understanding of the importance of image compression; utilizing various tools and techniques.
- Demonstrate knowledge of appropriate use of color and typography on the Web.
- Demonstrate knowledge of Client Web site production and development.
- Demonstrate knowledge of copyright rules (related terms, permission and citing copyrighted material)
- Understanding the CS4 Dreamweaver, Fireworks interface.

## **OVERVIEW**

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*Web Design* is a one semester, half-credit elective course offered by the Business and Computer Studies Department to students in grades nine through twelve at Darien High School. This course introduces students to basic concepts, technologies, issues and techniques required to developing and maintaining Web sites.

This course is geared for all students interested in designing and developing a Web site. There is no prerequisite for this course; however a basic knowledge of computer uses and file management is recommended. *Essential techniques will be reviewed as they pertain to each unit.*

Each section of *Web Design* meets seven days of each eight day rotation for one semester. Computer workstations and related software are provided by the district for in-school use. Students are working on the computers, in the Adobe CS4 environment 85% of class time.

Instruction will be a combination of lecture, hands-on creating, guided individual and group projects and reading assignments. Students will examine the how-to's, ins and outs and pitfalls of using graphics, color and fonts on web pages as well as working with tables and CSS. They will move beyond the WYSIWYG (what you see is what you get) editing tool and learn HTML code. Design techniques specific to web-based presentations, web page layout, effective navigation and the design process will be covered.

The students' final project will be to collaborate with a Darien High School club or teacher to develop a new website, or refine an existing one, utilizing the skills they have acquired during the semester.

## **ESSENTIAL QUESTIONS**

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- How does technology affect society, business and communication?
- What are the safe and legal responsibilities of being a good digital citizen?
- What is the Web design process and what are the different site structures?
- How does graphic design affect website design?
- What is a Web Portfolio?
- What are the technologies used to create websites?
- How does effective page layout and consistent navigation lead to usability?
- What communication skills are needed to create and implement a client's website?
- What are website testing procedures?
- What are the challenges of working with a client and how does one produce a final website that creates a satisfied client?

## **PROCESS SKILLS**

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Throughout the course of studies in *Web Design*, students will use the following process skills.

- Reading (Comprehending) – Instructions, articles
- Reading (Decoding) – Articles, interface guides
- Writing – creating content for web pages
- Listening – hearing what your client wants
- Demonstrating by creating Web pages
- Working independently and collaboratively
- Evaluating Websites based on established criteria
- Designing- unique Web pages
- Creating – original web site designs and layouts
- Problem Solving – troubleshooting computer issues, Adobe CS4 programs
- Appreciating – good design
- Speaking – constructive evaluation of peers web sites

## STUDENT PERFORMANCE SUMMARY

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Written Quizzes/tests (code, terminology and methods)

Demonstration – successful creation of a working web site

Oral Presentation with Visuals (flow chart, storyboard, wireframes and web site)

Web Portfolio including artifacts

Client Website

## GRADING GUIDELINES

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<u>Category</u>	<u>Expectations of Students</u>	<u>% of Report Card Grade</u>
<b>In Class Projects</b>	100% of all assignments are completed by their due dates.	60 % of quarter grade
<b>Tests</b>	Students demonstrate knowledge of web design and technological concepts, terminology and processes learned in class.	5% of quarter grade
<b>Quizzes</b>	Students demonstrate knowledge of web design and technological concepts, terminology and processes learned in class.	5% of quarter grade
<b>1<sup>st</sup> Quarter Project</b>	Students create a Web Portfolio	5% of semester grade
<b>Final Project</b>	Students create a 3 page Web site with a teacher or club demonstrating concepts and techniques learned throughout the course.	20% of semester grade
<b>Class Participation</b>	Students are actively engaged in all class discussions and tasks	5% of quarter grade

## **SECTION II – Units of Study**

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### **Summary of Units**

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<u>Unit</u>	<u>Title</u>	<u>Duration (Weeks)</u>
Unit 1:	History of the Internet and World Wide Web and Web Technologies	1
Unit 2:	Web and Graphic Design	2
Unit 3:	Web Design Using Adobe Dreamweaver	5
Unit 4:	Introduction to HTML	1
Unit 5:	Adobe Fireworks: Working with Graphics	2
Unit 6:	Dreamweaver and CSS	2
Unit 7:	Client Web site Production and Development	2
Unit 8:	Building and Testing a Client's Website	3

## 1. History of the Internet and World Wide Web, Web Technologies & Web Technologies

### Essential Questions

- How does technology affect society, business and communication?
- What are the safe and legal responsibilities of being a good digital citizen?
- What makes a Web site good?

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### Expectations from Mission Statement

In a variety of ways the DHS student will:

- Think critically, creatively, and adaptively while working independently and collaboratively to gain knowledge, to identify, understand and solve problems and to accomplish goals.
- Communicate effectively in multiple contexts and for various purposes.
- Develop reading and research strategies, observational skills, and aesthetic awareness through engagement with authentic, inquiry-based tasks;
- Value and demonstrate personal responsibility and ethical decision-making.

### Unit Goals:

- Understand the history of the Internet and World Wide Web.
- Understand the role of Internet technologies in society, business and communication.
- Demonstrate proficient use of computers that supports learning and productivity.
- Demonstrate and practice safe, legal and responsible use of information and technology.

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### CONTENT KNOWLEDGE OBJECTIVES

#### Initial Understanding

Through demonstration, analysis and lecture students will **identify and explain** the role of Internet technologies, be able to identify the types and purposes of the sites and practice legal and responsible use of information and technology.

#### Developing an Interpretation

Students will **examine** web sites and **analyze** technologies used in the various types of web sites. They will also examine the purposes of these sites and formats used to develop these sites.

#### Making Connections

Students will **compare** the different technologies used to create web sites and analyze benefits and limitations of each.

#### Taking a Critical Stance

Students will **evaluate** different Web sites for various real-world applications in terms of navigation, consistency, usability and accessibility.

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### VOCABULARY

Internet, Intranet, Extranet, browsers, packets, routing, blogs, ecommerce, HTML, XHTML, CSS, JavaScript, Flash, WYSIWYG

### **ACTIVITIES**

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Analyzing Websites  
File Management

### **PERFORMANCE ASSESSMENT**

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Student creation and presentation of Web site analysis. (One good, one bad)

### **CAREER AWARENESS**

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Web Designer

### **ADDITIONAL TEXTS/RESOURCES FOR USE BY STUDENTS**

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Adobe Activity Guide:

- Analyzing Websites U2\_07
- Principles and rules of copyright U1\_01

### **MATERIALS AND SUPPLIES**

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Handouts:

- Internet Technologies
- Web site navigation
- Graphic Design

## 2. Web and Graphic Design

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### Essential Questions

- How do you manage and name files in Web Design?
- What are the different web site structures?
- What is the web design process?
- How do you create flow charts, storyboards and wireframes?
- How does graphic design affect web site design?

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### Expectations from Mission Statement

In a variety of ways the DHS student will:

- Think critically, creatively, and adaptively while working independently and collaboratively to gain knowledge, to identify, understand and solve problems and to accomplish goals.
- Communicate effectively in multiple contexts and for various purposes.
- Develop reading and research strategies, observational skills, and aesthetic awareness through engagement with authentic, inquiry-based tasks.

Unit Goals:

- Understand the different types of web site structures.
- Understand the elements of sound graphic design.
- Demonstrate the ability to create: flow charts, storyboards and wireframes.
- Understand the website design process.
- Understand proper management and naming conventions of files.

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### CONTENT KNOWLEDGE OBJECTIVES

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#### Initial Understanding

Through demonstration, analysis and lecture students will **identify and explain** the different site structures, the website design process, file management, and the basics of graphic design in website development.

#### Developing an Interpretation

Students will **examine** different websites, **study** their design and **analyze** their web site structures. They will also examine the flow of the site and the naming and management of the files.

#### Making Connections

Students will **create** flow charts, storyboards and wireframes for their Web Portfolios.

#### Taking a Critical Stance

Students will **evaluate** the different web site structures and choose the type best suited for their web portfolios.

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### VOCABULARY

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Linear, hierarchical, webbed, broad, deep, flow charts, storyboards, wireframes, graphic design, movement, balance, unity, contrast, emphasis, line and color, web portfolio, site planning process

### **ACTIVITIES**

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Flow Charting  
Storyboards  
Wireframes  
Web Portfolio Development

### **PERFORMANCE ASSESSMENT**

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Students will begin the design of their Web Portfolios.  
Successful completion of flow charts, storyboards and wireframes for their Web Portfolios.  
File management handout completion using proper naming conventions.

### **CAREER AWARENESS**

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Web & Graphic Designer

### **ADDITIONAL TEXTS/RESOURCES FOR USE BY STUDENTS**

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Adobe Activity Guide

- File Management U2\_16
- Naming conventions U2\_14
- Production Storyboard Guide and Worksheet U3\_05 & \_06
- Wireframes U3\_04

### **MATERIALS AND SUPPLIES**

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Handouts:

- Flow Charts
- Web Site Structures
- Web Design Process

### 3. Web Design using Dreamweaver

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#### Essential Questions

- How do you use Adobe Dreamweaver to create a Web site?
- What is the purpose of a Web Portfolio?
- How do you FTP (upload) a site to the Internet?

---

#### Expectations from Mission Statement

In a variety of ways the DHS student will:

- Think critically, creatively, and adaptively while working independently and collaboratively to gain knowledge, to identify, understand and solve problems and to accomplish goals.
- Communicate effectively in multiple contexts and for various purposes.
- Develop reading and research strategies, observational skills, and aesthetic awareness through engagement with authentic, inquiry-based tasks.

Unit Goals:

- Understand the Dreamweaver Interface
- Acquire the tools necessary to create a Web site using Dreamweaver.

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#### CONTENT KNOWLEDGE OBJECTIVES

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##### Initial Understanding

Through demonstration, analysis, lecture and hands on students will **identify** the tools of the Dreamweaver program.

##### Developing an Interpretation

Students will **examine** the interface of the Dreamweaver program and **analyze** each of the tools uses.

##### Making Connections

Students will **create** skeletal web pages to produce their Web Portfolio website. Students will share these with their in class peers for review and redesign suggestions.

##### Taking a Critical Stance

Students will **evaluate** each other's sites and positively critique and offer suggestions for improvement.

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#### VOCABULARY

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Site setup, local and root folders, FTP, hyperlinks, document views, toolbars, panels, property inspector, inserting: text, links, images, styles, Web Portfolio, naming files

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#### ACTIVITIES

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Create Web Portfolio Web site. (Index/home page)

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#### PERFORMANCE ASSESSMENT

---

Create the skeletal Web Portfolio site from the flow chart, storyboards and wireframes created in the last unit.

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#### CAREER AWARENESS

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Web & Graphic Designer

## **ADDITIONAL TEXTS/RESOURCES FOR USE BY STUDENTS**

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Adobe Activity Guide:

- How to set up a root folder and site structure 2.1 U2\_01
- Planning a Home page 2.5 U2\_17
- DW Interface 2.1 U2\_03
- DW Insert Bar 2.1 U2\_06
- Student Portfolio 2.3 U2\_12 & U2\_13

## **MATERIALS AND SUPPLIES**

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Web Portfolio Assignment

#### 4. Introduction to Hypertext Markup Language (HTML)

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##### Essential Questions

- How does HTML differ from Dreamweaver?
- How does commenting help the coder?

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##### Expectations from Mission Statement

In a variety of ways the DHS student will:

- Think critically, creatively, and adaptively while working independently and collaboratively to gain knowledge, to identify, understand and solve problems and to accomplish goals.
- Communicate effectively in multiple contexts and for various purposes.
- Develop reading and research strategies, observational skills, and aesthetic awareness through engagement with authentic, inquiry-based tasks.

Unit Goals:

- Understand the structure and syntax of HTML
- Understand the importance of commenting code
- Acquire HTML web site development skills using the code view in Dreamweaver and explore coding in notepad

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##### CONTENT KNOWLEDGE OBJECTIVES

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###### Initial Understanding

Through demonstration, analysis, lecture and hands on, students will **identify and explain** the elements and mechanics of HTML coding.

###### Developing an Interpretation

Students will **examine** Dreamweaver's code view and analyze the benefits and limitations of WYSIWYG programs.

###### Making Connections

Students will **create** web pages using the Dreamweaver's code view or MS notepad.

###### Taking a Critical Stance

Students will **compare** and **make judgments** as to the best methods of creating web sites for real-world applications in terms of practicality, reliability and versatility.

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##### VOCABULARY

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HTML skeleton, HTML elements, special characters, Paragraphs, breaks, horizontal rules, blocked text, text links, targeting new windows, email links, anchors, images, image links, unordered lists, ordered lists, tables, attributes, document links

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##### ACTIVITIES

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Create a 3 page Environment site.

**PERFORMANCE ASSESSMENT**

---

Environment Website

HTML Quiz

**CAREER AWARENESS**

---

Web Design

**ADDITIONAL TEXTS/RESOURCES FOR USE BY STUDENTS**

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**MATERIALS AND SUPPLIES**

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Handouts:

- HTML Quick Reference Guide

## 5. Adobe Fireworks: Working with Graphics

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### Essential Questions

- How do you use Adobe Fireworks to create web graphics?
- How do you optimize images and how do they impact a Web site?

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### Expectations from Mission Statement

In a variety of ways the DHS student will:

- Think critically, creatively, and adaptively while working independently and collaboratively to gain knowledge, to identify, understand and solve problems and to accomplish goals.
- Communicate effectively in multiple contexts and for various purposes.
- Develop reading and research strategies, observational skills, and aesthetic awareness through engagement with authentic, inquiry-based tasks.

Unit Goals:

- Understand the Fireworks Interface
- Acquire the tools necessary to create artifacts and graphics for Web sites.

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### CONTENT KNOWLEDGE OBJECTIVES

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#### Initial Understanding

Through demonstration, analysis, lecture and hands on, students will **identify** the tools of the Fireworks program.

#### Developing an Interpretation

Students will **examine** various methods of image optimization and **analyze** the benefits and limitations of each.

#### Making Connections

Students will **create** a variety of different types of images for their Web Portfolio website. Students will share these with their class peers for review and redesign suggestions.

#### Taking a Critical Stance

Students will **compare** and **make judgments** as to the best methods of creating web graphics for real-world applications in terms of optimization of creating small files to decrease load time.

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### VOCABULARY

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Firework panels: floating & docked, selection movement and transformation tools: pointer, scale, crop; drawing and writing tools: line, rectangle, freeform, pen, text, knife; interaction objects tools: hotspot, hide slices, slice, show slices & hotspots; view tools: hand, zoom; image modification tools: marquee, magic wand, pencil, blur, lasso, brush, eraser, rubber stamp; color tools: eyedropper, paint bucket, stroke color, fill color. GIF, JPEG, PNG, masking, image optimization, nameplate, banners, buttons, and navigation bars

## **ACTIVITIES**

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### Creating Artifacts for Web Portfolios-Continue Web Portfolio Development

- Optimize a JPEG for the Web
- Optimize a GIF for the Web
- Edit a Photo optimized for use on the Web
- Create a Nameplate to be used on the Student Web Portfolio
- Create a Banner to be used on the Student Web Portfolio
- Create Buttons and Navigation bars

## **PERFORMANCE ASSESSMENT**

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JPEG & GIF

Nameplate

Banner

Buttons

## **CAREER AWARENESS**

---

Web and Graphic Design

## **ADDITIONAL TEXTS/RESOURCES FOR USE BY STUDENTS**

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## **MATERIALS AND SUPPLIES**

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Adobe Activity Guide:

- Firework Tools U1\_10
- Fireworks Panels U1\_11
- How to optimize JPEGs U1\_09
- How to optimize GIFs U1\_08
- How to create a nameplate U1\_12
- How to create a banner U1\_16
- How to Create Buttons and Navigation bars U2\_27

## **6. Dreamweaver and Cascade Style Sheets (CSS)**

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### **Essential Questions**

- How do the technical aspects of CSS impact Web design?
- How does effective page layout and consistent navigation lead to usability?

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### **Expectations from Mission Statement**

In a variety of ways the DHS student will:

- Think critically, creatively, and adaptively while working independently and collaboratively to gain knowledge, to identify, understand and solve problems and to accomplish goals.
- Communicate effectively in multiple contexts and for various purposes.
- Develop reading and research strategies, observational skills, and aesthetic awareness through engagement with authentic, inquiry-based tasks.

Unit Goals:

- Understand Web page layout using CSS in Dreamweaver.
- Demonstrate the ability to create CSS rules in Dreamweaver.

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### **CONTENT KNOWLEDGE OBJECTIVES**

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#### Initial Understanding

Through demonstration, analysis and lecture students will **identify and explain** the different CSS elements used to lay out a Web site.

#### Developing an Interpretation

Students will **examine** the CSS features of Dreamweaver and **analyze** the benefits of external vs. internal style sheets in designing consistent web pages.

#### Making Connections

Students will **create** a web site using CSS styles and compare them to sites developed prior deciding which is more professional, consistent and aesthetically more appealing in appearance.

#### Taking a Critical Stance

Students will **evaluate** the use of HTML VS. CSS styling's features and determine which will best lead to creating a consistent, useable Web site.

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### **VOCABULARY**

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HTML tags, CSS selectors, CSS panel in Dreamweaver, text formatting, style sheets, margins, padding, borders, AP div (*absolutely positioned div tags*), ID, properties, elements

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### **ACTIVITIES**

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Create a Web page layout using CSS for their Portfolios

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### **PERFORMANCE ASSESSMENT**

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Finish Web Portfolio Website

## **CAREER AWARENESS**

---

Web Design

## **ADDITIONAL TEXTS/RESOURCES FOR USE BY STUDENTS**

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### **MATERIALS AND SUPPLIES**

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Adobe Activity Guide

- Understanding CSS U2\_08
- CSS Styles Panel guide U2\_09
- How to create consistent pages U2\_19
- How to Document Properties U2\_20
- How to create CSS U3\_07

## 7. Client Website Production and Development

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### Essential Questions

- How does one create a client website development and production plan?
- How does one identify the client's goals, design and technical requirements and main content?
- How does one communicate effectively to create and implement the client's desired website?

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### Expectations from Mission Statement

In a variety of ways the DHS student will:

- Think critically, creatively, and adaptively while working independently and collaboratively to gain knowledge, to identify, understand and solve problems and to accomplish goals.
- Communicate effectively in multiple contexts and for various purposes.
- Develop reading and research strategies, observational skills, and aesthetic awareness through engagement with authentic, inquiry-based tasks.

Unit Goals:

- Understand the client's needs and requirements
- Define a design and plan for the client's website project
- Define technical requirements for the client's website
- Gather content from the client for their website

---

### CONTENT KNOWLEDGE OBJECTIVES

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#### Initial Understanding

Through demonstration, analysis, interview, and lecture students will **identify** the client's requirements and website needs.

#### Developing an Interpretation

Students will **review** the client's needs and **examine** the technical requirements for their website, and analyze which technologies they will use to produce the site.

#### Making Connections

Students will **create** flow charts, storyboards, wireframes, and technologies they will use for their clients review.

#### Taking a Critical Stance

Students will **present** designs to the client and actively listen to the client feedback, and if needed redesign the site to the client's specifications.

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### VOCABULARY

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Wireframe, flowchart, storyboard, design review, audience, design comp, client, interview, project plan, active listening

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### ACTIVITIES

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Client Interview

Storyboards (*for all pages of the client's website*)

Wireframes (*for all pages of the client's website*)

Client content (*collection of*)

**PERFORMANCE ASSESSMENT**

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Client Interview

Client Design Documents: flow charts, Storyboards, Wireframes

**CAREER AWARENESS**

---

Web and Graphic Design

**ADDITIONAL TEXTS/RESOURCES FOR USE BY STUDENTS**

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**MATERIALS AND SUPPLIES**

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Adobe Activity Guide:

- Pro Web Design Development U3\_01
- Client Interview U3\_02

## **8. Building and Testing a Client's Website**

### **Essential Questions**

- How does the student synthesize information from client interviews and feedback to create the desired website?
- What are the project management skills required to develop a website for a client?
- What are the website testing procedures?

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### **Expectations from Mission Statement**

In a variety of ways the DHS student will:

- Think critically, creatively, and adaptively while working independently and collaboratively to gain knowledge, to identify, understand and solve problems and to accomplish goals.
- Communicate effectively in multiple contexts and for various purposes.
- Develop reading and research strategies, observational skills, and aesthetic awareness through engagement with authentic, inquiry-based tasks.

Unit Goals:

- Work collaboratively with the client to build their website
- Revise the site based on the Client's feedback
- Test the site
- Produce a site that the client can upload to the Internet

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### **CONTENT KNOWLEDGE OBJECTIVES**

#### Initial Understanding

Students will **revise** design comps and present final comps to clients.

#### Developing an Interpretation

Students will **build** the website to their client's specifications.

#### Making Connections

Students will **conduct** technical testing on the client's website and compile a bug list. They will also conduct a usability test and compile the results.

#### Taking a Critical Stance

Students will **present** the final website to the client for upload.

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### **VOCABULARY**

Technical testing, usability testing, bug list, launch, design, content, consistency, usability, navigation, readability, uniformity, comp, templates

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### **ACTIVITIES**

Create the final client website

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### **PERFORMANCE ASSESSMENT**

Site Building & Site Testing

Site upload

Final Website

## CAREER AWARENESS

Web and Graphic Design

## ADDITIONAL TEXTS/RESOURCES FOR USE BY STUDENTS

## MATERIALS AND SUPPLIES

Final Project Rubrics

### Sample Project Overview

#### Unit 8 Lesson Overview: Building and Testing a Client's Website

##### Unit Goals:

- Work collaboratively with the client to build their website
- Revise the site based on the Client's feedback
- Test the site
- Produce a site that the client can upload to the Internet

##### Essential Questions

- How does the student synthesize information from client interviews and feedback to create the desired website?
- What are the project management skills required to develop a website for a client?
- What are the website testing procedures?

##### Handouts:

- Website production phases
- Storyboards and wireframes
- Client Interview
- Final Project Rubrics

##### Lecture:

- I. Final Project Requirements- *review detailed rubrics*
- II. Website Production Phases- *handout*
- III. How to Interview a Client-*handout*
- IV. Creation of Flow Charts, Storyboards, & Wireframes post interview- *handout and example*
- V. Design Presentation to the client
- VI. Client feedback
- VII. Revisions and Creation of the websites colors, fonts, design based on client approval
- VIII. Testing the site: different browsers
- IX. Presenting the site to the customer
- X. Changes and final product

Web Design Website:

<http://www.darienps.org/dhswebdesign/index.html>

**Final Project Requirements:**

The final project for this course is to develop a Web site for a teacher or club in the school.

The site must contain:

1. A minimum of 3 internal links ( 3 pages total, including the index/home page)
2. A minimum of 3 external links
3. Graphics
4. Reference / copyright credits
5. Content
6. Use of each of the following: table, unordered and ordered lists

Show me your best work! Impress me and your client with your technical and design knowledge.

<b>Category</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>Total Points</b>
<b>Work Ethic</b>	Student always uses classroom project time well. Conversations are primarily focused on the project and things needed to get the work done and are held in a manner that doesn't disrupt others.	Student usually uses classroom project time well. Conversations are focused on the project and things needed to get the work done and are held in a manner that doesn't disrupt others.	Student usually uses classroom project time well, but occasionally distracts others from their work.	Student does not use classroom project time well or is typically disruptive to the work of others.	
<b>Spelling and Grammar</b>	There are no errors in spelling, punctuation or grammar in the final draft of the Web site.	There are 1-3 errors in spelling, punctuation or grammar in the final draft of the Web site.	There are 4-5 errors in spelling, punctuation or grammar in the final draft of the Web site.	There are more than 5 errors in spelling, punctuation or grammar in the final draft of the Web site.	
<b>Copyright</b>	All sources are properly cited according to MLA style. Permission to use any graphics from web pages or other sources has been received.	Most sources are properly cited according to MLA Style. Permission to use any graphics from web pages or other sources has been received.	Some sources have not been properly cited and all permissions have not been received.	Sources have not been properly cited and permissions have not been received.	

Category	4	3	2	1	Total Points
<b>Navigation</b>	Links for navigation are clearly labeled, consistently placed and allow the user to easily move from a page to related pages, and take the reader where s/he expects to go. They <u>do not</u> become lost.	Links for navigation are clearly labeled, allow the user to easily move from a page to related pages, and internal links take the reader where s/he expects to go. A user <u>rarely</u> becomes lost.	Links for navigation take the user where s/he expects to go, but some needed links seem to be missing. A user <u>sometimes</u> gets lost.	Some links do not take the reader to the sites described. A user feels <u>lost</u> .	
<b>Storyboard or planning sheet</b>	Storyboard is complete. Includes <u>all</u> assigned elements, in addition to planned formats, necessary URL's and resources.	Storyboard is somewhat complete. Includes <u>many</u> assigned elements, in addition to <u>most</u> planned formats, necessary URL's and resources.	Storyboard is not complete. Includes few assigned elements or planned formats, necessary URL's and resources.	Story board is incomplete and lacks necessary URL's, formats, and resources to complete the project.	
<b>Wireframe</b>	Wireframe is complete. Includes all assigned elements.	Wireframe is somewhat complete. Includes most assigned elements.	Wireframe is not complete. Includes few assigned elements.		
<b>Learning of Material</b>	The student has an <u>exceptional</u> understanding of the procedures used to make the Web site. Can easily answer questions about the procedures used to make the site.	The student shows a <u>good</u> understanding of the procedures used to make the Web site. Can easily answer questions about the procedures used to make the site.	The student shows a fair understanding of the procedures used to make the Web site. Can easily answer questions about the procedures used to make the site.	The student did not appear to learn much from this project. Cannot answer most questions about the procedures used to make the Web site.	

Category	4	3	2	1	Total Score
<b>Originality</b>	The Web site shows significant evidence of originality and inventiveness.	The Web site shows evidence of originality while based on a collection of other peoples' ideas; the work extends beyond to offer new insights.	The work is a rehash of other people's ideas. There is no evidence of new thought or inventiveness.	The work is a copy of other's. There are no new ideas.	
<b>Organization of Content</b>	Logical, <u>intuitive</u> sequence of information. Menus and links to <u>all</u> information are clear and direct.	Logical sequence of information. Menus and links information are clear and direct.	Some logical sequence of information, but menu's and links are confusing or flawed.	No logical sequence of information. Menus and paths to information are not evident.	
<b>Layout</b>	The Website is exceptionally attractive and has a useable layout. It is easy to locate all important elements.	The Web pages have an attractive and useable layout. It is easy to locate all important elements.	The Web pages have a useable layout, but may appear busy or boring. It is easy to locate most of the important elements.	The Web pages are cluttered looking or confusing. It is difficult to locate important elements.	
<b>Graphics</b>	Graphics are related to the theme/purpose of the site, are cropped and of high quality and enhance the reader's interest.	Graphics are related to the theme/purpose of the site, and are of good quality and enhance reader interest.	Graphics are related to the theme/purpose of the site, and are of good quality.	Graphics seem randomly chosen and are of low quality or distract the reader.	
<b>Background</b>	Background is exceptionally attractive, consistent across pages, adds to the theme or purpose of the site and does not detract from readability.	Background is attractive, consistent across pages, adds to the theme and does not detract from readability.	Background is consistent across pages and does not detract from readability.	Background detracts from the readability of the site.	
<b>Fonts</b>	The fonts are consistent, easy to read and point size varies appropriately for headings and text. Use of font styles (bold, italic) is used consistently and improves readability.	The fonts are consistent, easy to read and point size varies appropriately for headings and text.	The fonts are consistent and point sizes varies appropriately for headings and text.	A wide variety of fonts, styles and point sizes was used.	

## Storyboards, Wireframes and Flow Charts

What is a storyboard?

- A storyboard is a scene-by-scene drawing of the sequence of action.
- Storyboards tell the story visually with enough detail for developers to know what to build.
- Developed by Walt Disney.

Two basic types of storyboards

- Static – No action elements indicated. Used for a graphical design such as a logo or page banner.
- Animatic – Indicating action, movement, camera angles, or the passage of time. Typically used in making movies.

Why storyboard?

- Easier and cheaper to produce and test ideas on paper before production.
- Easier to generate alternate ideas as you think of them.

What is a wireframe?

- A graphic or rough draft illustration of the website layout.
- Cost effective to generate sketches vs. having to program designs.
- Able to present multiple web options.
- They can be created with pen and paper or with a software program such as MS Word or Adobe Fireworks.
- Best if created in black and white – so customers will focus on content and layout vs. design.

What is a Flow chart?

- A visual representation of the sequence of the website.
- It organizes your topics into a plan.
- It sets the information flow or the website.
- A site map.

## Storyboard

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Site name: \_\_\_\_\_

Page title: \_\_\_\_\_ Filename: \_\_\_\_\_

Wireframe (everything specific to this page; common navigation elements optional)

Background color (name and/or hexadecimal value)

\_\_\_\_\_

Heading texts (fonts, styles, borders, margins, alignment, padding, and colors)

\_\_\_\_\_

Body texts (fonts, styles, borders, margins, alignment, padding, and colors)

\_\_\_\_\_

Description (what happens on the screen, such as order of display, text, and animation steps)

\_\_\_\_\_

\_\_\_\_\_

Navigation (button or link names and destinations)

\_\_\_\_\_

\_\_\_\_\_

Graphics files (all graphics specific to this page)

\_\_\_\_\_

\_\_\_\_\_

## Storyboard Example

**Name:** L. LaRusso Date: 10-20-11

**Site name:** Darien Physical Education & Health

**Page title:** Physical Education Home Page Filename: index.html

**Wireframe** (*everything specific to this page; common navigation elements optional*)

**Background color (name and/or hexadecimal value):** black (#000000)

**Heading texts (fonts, styles, borders, margins, alignment, padding, and colors):** Arial, 18 points, bold, left aligned, 6 pixel padding on top and bottom, black text.

**Body texts (fonts, styles, borders, margins, alignment, padding, and colors):** Body - Arial, 11 points, left aligned, black text. Link Body - Arial, 10 points, left aligned, dark blue text, underlined.

**Description (what happens on the screen, such as order of display, text, and animation steps):**  
The navigation buttons will all turn a shade lighter when a site visitor rolls the pointer over one of them. When the pointer is not over any of the navigation buttons, they all display the same darker color.

### **Navigation (button or link names and destinations):**

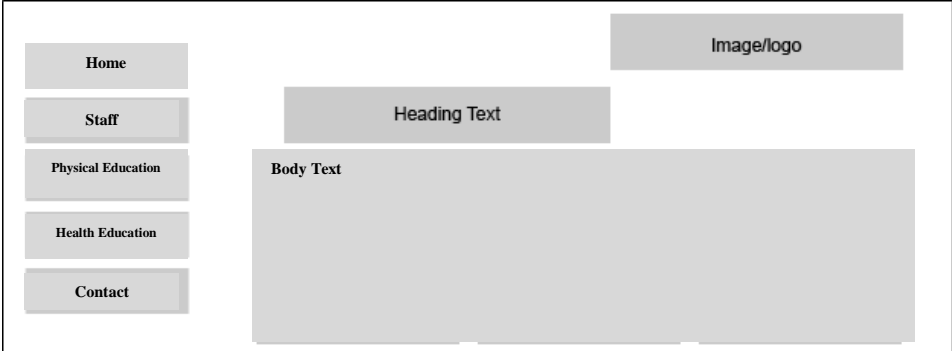
Home: Goes to index.htm – welcome page, philosophy, guidelines, requirements

Other Pages: physed.htm, health.htm, staff.htm, contact.htm

- physed.htm – requirements , links to all sports taught –
  - each sports page has objectives, rules, history
- health.htm –requirements, links to 11/12 and 9/10 – curriculum topics
  - health handouts
- staff.htm – links to each pe staff member's picture, bio and website link
- contact.htm – has a directory w/link to email and phone # of each staff member
- links.htm - Each link goes to one of the following:
  - Darien High School: <http://www.darienps.org/dhs/>
  - Darien Athletics: <http://www.darienps.org/darienathletics/>
  - AAHPERD: <http://www.aahperd.org/>
  - FCIAC: <http://www.fcias.net/>
  - CIAC: <http://www.casciac.org/>

**Graphics files** (all graphics specific to this page): bwave\_logo.png and wave\_logo.gif.

Wireframe Example:



## **Website Production Phases**

### **Define phase**

- Interview the client to understand goals, audience, content, design, and delivery requirements.
- Organize and outline interview information to help define the site.

### **Structure phase**

- Develop and communicate structure and organization of site based on interview and content.
- Use a flowchart to organize information across site and storyboards for layout.
- Use wireframes with simple shapes for buttons and graphics to show location of information on pages.
- Show how site information will flow without providing too many details about each page. Keep it in black and white so structure is the focus.

### **Design phase**

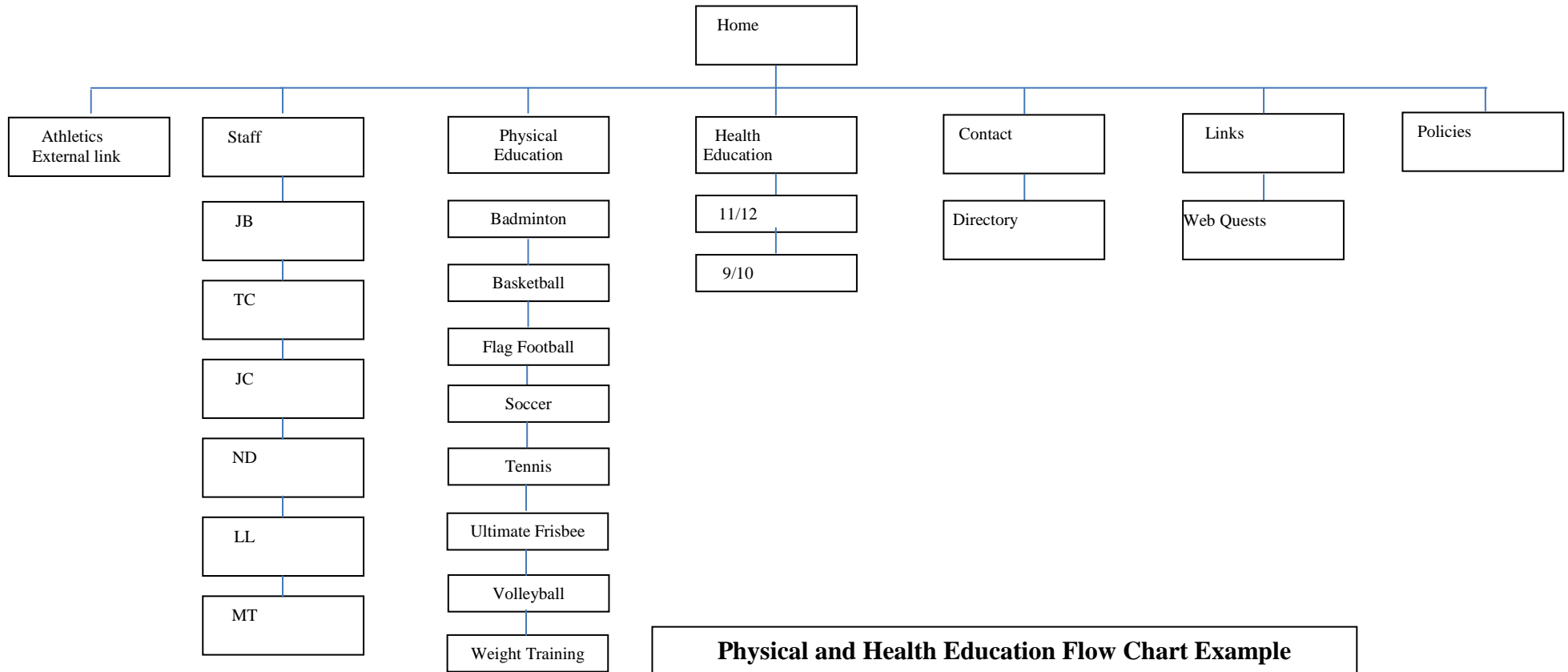
- Create visual comps to present the site through colors, fonts, and images.
- Leave comps rough, with room for change—enable client to participate in the design process.
- Validate design choices against client goals and target audience.
- Present at least two visual comps and describe how they meet audience, goals, style, and delivery needs.
- Incorporate client feedback, adding more content as client approves design elements.

### **Build and test phase**

- Create production storyboards to help define content and navigation.
- Use page templates, library items, and styles to help build pages efficiently and with a consistent look.
- Check files in and out.
- Conduct a technical test to validate content, links, and graphics against production storyboards.
- Conduct a usability test to make sure the site is easy to use. Have parents or friends navigate through your site.
- After testing, revise the site to fix technical errors and incorporate feedback from usability testers.

### **Launch phase**

- Use effective page titles to help search engines that look for content.
- Use alternative text for images to help search engines that look for images.



### **SECTION III Goals and Standards**

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Darien High School students will:

1. Think critically, and adaptively, while working independently and collaboratively, to identify, understand, and solve complex problems, and to accomplish goals;
2. Communicate effectively in multiple contexts for various purposes;
3. Develop reading and research strategies, observation skills, and aesthetic awareness through engagement with authentic, inquiry based tasks;
5. Value and demonstrate personal responsibility and ethical decision making.

National Standards:

NT.K-12.1 Basic Operations and Concepts

- Students demonstrate a sound understanding of the nature and operation of technology systems.
- Students are proficient in the use of technology.

NT. K-12.2 Social, Ethical and Human Issues

- Students practice responsible use of technology systems, information and software.

NT. K-12.3 Technology Productivity Tools

- Students use technology tools to enhance learning, increase productivity and promote creativity.
- Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications and produce creative works.

NT. K-12.4 Technology Communication Tools

- Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

NT. K-12.5 Technology Research Tools

- Students use technology to locate, evaluate and collect information from a variety of sources.
- Students use technology tools to process data and report results.
- Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.

NT.K-12.6 Technology Problem-Solving and Decision Making tools

- Students use technology resources for solving problems and making informed decisions.
- Students employ technology in the development of strategies for solving problems in the real world.

### **Related Goals and Standards**

### **SECTION IV - Learning Resources**

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#### **SUPPLEMENTAL RESOURCES**

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- Digital Design: Foundations of Web Design, Adobe Systems, Inc. 2008
- Adobe Education Exchange: <http://edexchange.adobe.com/pages/home>
- Adobe Fireworks CS4 Classroom in a Book, Adobe Creative Team, Adobe Press
- Adobe Dreamweaver CS4 Classroom in a Book, Adobe Creative Team, Adobe Press
- Adobe Photoshop CS4 Classroom in a Book, Adobe Creative Team, Adobe Press

- W3C Schools Tutorials: <http://www.w3schools.com/w3c/default.asp>
- HTML, XHTML, and CSS, Sixth Edition, Elizabeth Castro, 2006