

WEB PAGE DESIGN AND DEVELOPMENT 2
COURSE CODE: 5033

COURSE DESCRIPTION: This course is designed to provide the student with the knowledge and skills needed to design Web pages. Students will develop skills in designing, implementing, and maintaining a Web site using authoring tools.

NOTE: Web pages created by students in this course are not to be published without following district guidelines.

OBJECTIVE: Given the necessary equipment, supplies, and facilities, the student will be able to successfully complete all of the following core standards for a course that grants one unit of credit.

COMPUTER REQUIREMENTS: One computer per student

REQUIRED PREREQUISITE(S): Web Page Design and Development 1

COURSE CREDIT: 1 unit

RECOMMENDED GRADE LEVELS: 10–12

RESOURCES:

www.mysctextbooks.com

RECOMMENDED SOFTWARE:

Adobe CS3 Web Design Suite **or**

Adobe Dreamweaver

Adobe Photoshop

Adobe Fireworks

Adobe Illustrator

Macromedia: Flash, Dreamweaver, Fireworks, and Director

A. SAFETY AND ETHICS

1. Identify major causes of work-related accidents in offices.
2. Describe the threats to a computer network, methods of avoiding attacks, and options in dealing with virus attacks.
3. Identify potential abuse and unethical uses of computers and networks.
4. Explain the consequences of illegal, social, and unethical uses of information technologies (e.g., piracy; illegal downloading; licensing infringement; inappropriate uses of software, hardware, and mobile devices).

5. Differentiate between freeware, shareware, and public domain software copyrights.
6. Discuss computer crimes, terms of use, and legal issues such as copyright laws, fair use laws, and ethics pertaining to scanned and downloaded clip art images, photographs, documents, video, recorded sounds and music, trademarks, and other elements for use in Web publications.
7. Identify netiquette including the use of e-mail, social networking, blogs, texting, and chatting.
8. Describe ethical and legal practices in business professions such as safeguarding the confidentiality of business-related information.

B. EMPLOYABILITY SKILLS

1. Identify positive work practices (e.g., appropriate dress code for the workplace, personal grooming, punctuality, time management, organization).
2. Demonstrate positive interpersonal skills (e.g., communication, respect, teamwork).

C. STUDENT ORGANIZATIONS

1. Explain how related student organizations are integral parts of career and technology education courses.
2. Explain the goals and objectives of related student organizations.
3. List opportunities available to students through participation in related student organization conferences/competitions, community service, philanthropy, and other activities.
4. Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.

D. ADVANCED HTML TOOLS

1. Test various programming options designed to accompany HTML (such as Common Gateway Interface [CGI], JAVA, JavaScript, Applets, XML, XHTML, ASP, and SQL).
2. Develop a Web-based resource directory of sites that instruct and support users of advanced HTML tools.
3. Analyze and modify HTML coding.

E. CSS

1. Define CSS
2. Identify the advantages of using CSS styles versus HTML tags for formatting.
3. Differentiate between the three types of CSS styles: external, embedded, and inline.

4. List the three parts of CSS syntax: selector, property, and value.
5. Create a link in an HTML document to an external style sheet file.
6. Create an external cascading style sheet that controls the formatting of the following properties and attributes: background, text, font, border, outline, margin, padding, list, and table.
7. Create an internal style sheet for a document that has a unique style
8. Apply an inline style attribute to a tag in an HTML document.

F. JAVASCRIPT

1. Write text with JavaScript.
2. Describe when the JavaScript is executed based on its placement in the document (e.g., in the head section versus the body section of a Web page).
3. Differentiate between JavaScript statement, code, blocks, comments, variables, operators, and syntax.
4. List three types of operators and their uses.
5. Name four conditional statements and their uses.
6. Write JavaScript to create an alert box.
7. Write JavaScript to create a prompt box.
8. Write JavaScript event to submit an HTML form.
9. Write JavaScript to create a rollover.
10. Write JavaScript to create a photo gallery.
11. Write JavaScript to update the date stamp.

G. IMPLEMENTING AND MAINTAINING WEB PAGES

1. Create a Web site implementing advanced coding tools.
2. Develop a plan for hosting a Web site.
3. Describe the tasks performed by a Web master to update the Web site.
4. Describe the tasks performed by a Web master to maintain the Web site.
5. Describe the major features of an effective Web page tracking system.

H. ADVANCED WEB DEVELOPMENT

1. Identify Multipurpose Internet Mail Extension (MIME) types.
2. Discuss Web site server security.
3. Describe Internet naming conventions (DNS).
4. Identify accessibility issues (browser, ADA, etc.).
5. Test Web sites.
6. Validate Web sites.

7. Set up a Web server (optional depending on hardware availability).
8. Administer a Web server (optional depending on hardware availability).

I. DREAMWEAVER (ORGANIZING AND MODIFYING CONTENT)

1. Set document properties.
2. Modify document properties.
3. Organize content by using tables.
4. Organize Web page layout with absolutely-positioned div tags and CSS styles.
5. Organize Web page layout using frames and framesets.
6. Modify text and text properties.
7. Modify images and image properties.
8. Modify Flash movies on a Web page.
9. Create Web page templates.
10. Use basic HTML tags to set up an HTML document.
11. Use basic HTML tags to format text.
12. Use basic HTML tags to add links.
13. Use basic HTML tags to create tables
14. Use basic HTML tags to build ordered and unordered lists.
15. Add head content to make a Web page visible to search engines.
16. Use CSS to implement a reusable design.

J. DREAMWEAVER (EVALUATING AND MAINTAINING A SITE)

1. Conduct basic technical tests.
2. Identify techniques for basic usability tests.
3. Present Web pages to others (such as team members and clients) for feedback and evaluation.
4. Identify methods for collecting site feedback.
5. Manage assets, links, and files for a site.
6. Publish and update site files to a remote server.