WEB PAGE DESIGN AND DEVELOPMENT 1
COURSE CODE: 5031

COURSE DESCRIPTION: This course is designed to provide students 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. Successful completion of this course will prepare the student to take industry certification test(s).

*NOTE: W*eb pages created by students in this course are not to be published without following district guidelines.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): Keyboarding 5100 (or Keyboarding Proficiency Test) and Computer Applications or Integrated Business Applications

RECOMMENDED PREREQUISITE(S): Multimedia or Digital Input Technologies

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. WEB PAGE DESIGN

1. Define Web page terminology.
2. Identify basic uses of Web sites in business, industry, government, and education.
3. Evaluate existing Web sites using design criteria.
4. Determine the purpose and target audience of a Web page.
5. Locate resources, hypertext, and external links to incorporate in a Web page.
6. Plan a Web site.

7. Design a Web site.
8. Open a Web page using a browser.
9. Evaluate the source code of an existing Web page.
10. Test the Web page using different browsers.

E. HTML

1. Define HTML standard codes.
2. Use basic HTML tags.
3. Use HTML tags to produce a Web page using a text editor.
4. Insert graphic and sound files into a Web page.
5. Use HTML to create visual enhancements such as background color, effective use of space, font formats, styles, etc.
6. Create a simple Web page.

F. ADVANCED HTML TOOLS

1. State the purpose of advanced HTML tools (e.g., tables, forms, frames, animation, cascading style sheets).
2. Discuss the requirements of an offer and acceptance and how the offer can be terminated/discharged.
3. Test an HTML document that displays two or more HTML files.
4. Create an HTML document that uses tables to organize and display information.
5. Test an HTML document that uses tables to organize and display information.
6. Create an HTML document that contains a form with text boxes, option buttons, and check boxes.
7. Test an HTML document that contains a form with text boxes, option buttons, and check boxes.

G. CSS

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

H. JAVASCRIPT

1. Define JavaScript.
2. Describe when the JavaScript is executed based on its placement in the document: in the head section versus the body section of a Web page.
3. Locate JavaScript code that may be useful.
4. Insert JavaScript code using authoring tools.

I. IMPLEMENTING AND MAINTAINING WEB PAGES

1. Define terminology associated with implementing and maintaining a Web page (e.g., posting, hosting, uploading, Web server, Web server software, Hypertext Transfer Protocol (HTTP), Web designer, Webmaster, File Transfer Protocol (FTP), domain name, INterNIC).
2. Explain the domain naming system.
3. Develop a plan for uploading a Web page.

J. USING DREAMWEAVER

1. Define Dreamweaver.
2. Identify elements of the Dreamweaver interface.
3. Use the Insert bar.
4. Use the Property inspector.
5. Use the Assets panel.
6. Use the Files panel.

K. ADDING CONTENT IN DREAMWEAVER

1. Define a Dreamweaver site.
2. Create a Web page.
3. Title the Web page.
4. Name the Web page.
5. Save the Web page.
6. Create Web pages and a site map (site index) that maintain the planned Web site hierarchy following a flowchart and storyboards.
7. Add text to a Web page.
8. Insert images on a Web page.
9. Apply alternative text on a Web page.
10. Link Web content using hyperlinks, e-mail links, and named anchors.
11. Insert rich media such as video, sound, and animation in Flash format.
12. Insert navigation bars, rollover images, and buttons created in Adobe Fireworks on a Web page.
13. Build image maps.
14. Import tabular data to a Web page.
15. Import a Microsoft Word or Microsoft Excel document to a Web page.
16. Create forms.