

FUNDAMENTALS OF WEBPAGE DESIGN AND DEVELOPMENT
COURSE CODE: 5031
STUDENT PROFILE

STUDENT'S NAME:		TEACHER'S NAME:			
School Year/Semester:		Grade:			
Begin Date:		Date Completed:			
Directions: Document student's progress using the applicable rating scales below: Enter date of completion under the appropriate column. 0 - Requires additional instruction and or close supervision (60-69) 1 – Has not received instruction in this area / no experience or knowledge of this task (N/A) 2 – Can perform the task completely with limited supervision (70-79) 3 – Can apply and perform independently (80-100)					
A. SAFETY		0	1	2	3
1	Review school safety policies and procedures.				
2	Review classroom safety rules and procedures.				
3	Review safety procedures for using equipment in the classroom.				
4	Identify major causes of work-related accidents in office environments.				
5	Demonstrate safety skills in an office/work environment				
B. STUDENT ORGANIZATIONS		0	1	2	3
1	Identify the purpose and goals of a Career and Technology Student Organization (CTSO).				
2	Explain how CTSOs are integral parts of specific clusters, majors, and/or courses.				
3	Explain the benefits and responsibilities of being a member of a CTSO.				
4	List leadership opportunities that are available to students through participation in CTSO conferences, competitions, community service, philanthropy, and other activities.				
5	Explain how participation in CTSOs can promote lifelong benefits in other professional and civic organizations.				
C. TECHNOLOGY KNOWLEDGE		0	1	2	3
1	Demonstrate proficiency and skills associated with the use of technologies that are common to a specific occupation (e.g., typing speed, style type, position).				
2	Identify proper netiquette when using e-mail, social media, and other technologies for communication purposes.				

3	Identify potential abuse and unethical uses of laptops, tablets, computers, and/or networks.				
4	Explain the consequences of social, illegal, and unethical uses of technology (e.g., cyber bullying; piracy; illegal downloading; cyberbullying; licensing infringement; inappropriate uses of software, hardware, and mobile devices in the work environment).				
5	Discuss legal issues and the terms of use related to copyright laws, fair use laws, and ethics pertaining to downloading of images, photographs, Creative Commons, documents, video, sounds, music, trademarks, and other elements for personal use.				
6	Describe ethical and legal practices of safeguarding the confidentiality of business-related information.				
7	Describe possible threats to a laptop, tablet, computer, and/or network and methods of avoiding attacks.				
8	Evaluate various solutions to common hardware and software problems.				
D. PERSONAL QUALITIES AND EMPLOYABILITY SKILLS		0	1	2	3
1	Demonstrate punctuality.				
2	Demonstrate critical thinking and problem-solving skills				
3	Demonstrate initiative and self-direction.				
4	Demonstrate integrity.				
5	Demonstrate work ethic.				
6	Demonstrate conflict resolution skills.				
7	Demonstrate listening and speaking skills.				
8	Demonstrate respect for diversity.				
9	Demonstrate customer service orientation.				
10	Demonstrate teamwork.				
E. PROFESSIONAL KNOWLEDGE		0	1	2	3
1	Demonstrate global or “big picture” thinking.				
2	Demonstrate career and life management skills and goal-making.				
3	Demonstrate continuous learning and adaptability skills to changing job requirements.				
4	Demonstrate time and resource management skills.				
5	Demonstrates information literacy skills.				

6	Demonstrates information security skills.				
7	Demonstrates information technology skills.				
8	Demonstrates knowledge and use of job-specific tools and technologies.				
9	Demonstrate job-specific mathematics skills.				
10	Demonstrates professionalism in the workplace.				
11	Demonstrates reading and writing skills.				
12	Demonstrates workplace safety.				
F. WEB DESIGN PRINCIPLES (INCORPORATED THROUGHOUT THE COURSE)		0	1	2	3
1	Define web terminology.				
2	Describe the history and evolution of the internet.				
3	Explain how the Internet functions, including the World Wide Web (WWW), browsers, FTP, URL, ISP, encryption, https, and domains.				
4	Describe the tools for accessing the Internet.				
5	Explain how websites and social media solve problems in business, industry, government, and education.				
6	Explore principles of e-commerce as they apply to web development, mobile devices, banking, and government regulations.				
7	Explain the role of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), and JavaScript (or a similar scripting language) in Web development.				
G. PLANNING AND DESIGN (INCORPORATED THROUGHOUT THE COURSE)		0	1	2	3
1	Utilize a design document as part of the design and development process.				
2	Create relevant and appropriate content including text, graphics, and hyperlinks.				
3	Develop a file management system for website content, utilizing proper naming conventions for files and folders.				
4	Optimize media for web content (i.e., file size, resolution, compression).				
5	Explore and apply color principles to websites.				
6	Explore and apply current best practices for web typography.				

7	Research and incorporate features that ensure a quality user experience (e.g., white space, page speed, interactivity, hyperlink differentiation, website consistency, responsiveness, accessibility, data usage).				
8	Evaluate the design of existing websites and their source code.				
9	Research current best practices and emerging technologies.				
10	Critique websites for professional quality in look and layout based on design principles.				
H. CONSTRUCTING WEBSITES: HTML		0	1	2	3
1	Develop webpages using a text editor (e.g., Notepad, Notepad++, Textpad, and Textedit).				
2	Explain the purpose of the doctype declaration.				
3	Structure a webpage using appropriate HTML elements (e.g., html, head, title, body, meta, style).				
4	Use HTML rules to create functional web pages (e.g., lowercase elements, proper nesting, quotes for attribute values).				
5	Use a variety of HTML elements to create webpages (e.g., headings, lists, images, hyperlinks, span, div).				
6	Compare and contrast block and inline elements.				
7	Create relative and absolute hyperlinks.				
8	Use special characters (e.g., © "e; < > & —).				
9	Demonstrate the use of semantic elements (e.g., header, footer, section, article, nav, aside).				
10	Embed third-party content into a web page (e.g., calendar, form, map, video, Bootstrap web components).				
I. CONSTRUCTING WEBSITES: CSS		0	1	2	3
1	Create and modify CSS to format the styling of HTML elements and page layout.				
2	Identify parts of CSS syntax (i.e., rule, declaration, selector, property, value).				
3	Compare and contrast the placement and use of styles (e.g., inline, internal and external styles).				
4	Use CSS to format HTML elements including, but not limited to:				

5	Format page layout with CSS including, but not limited to:				
J. CONSTRUCTING WEBSITES: JAVASCRIPT (OPTIONAL)		0	1	2	3
1	Distinguish between variables and functions in writing JavaScript.				
2	Demonstrate how JavaScript can enhance a project.				
3	Implement a simple script that obtains input and displays it as output.				
K. QUALITY ANALYSIS & USER EXPERIENCE		0	1	2	3
1	Identify and use validation tools.				
2	Comply with legal requirements and standards for accessibility on the web.				
3	Optimize websites to accommodate users with special needs.				
4	Discuss issues relating to usability on a variety of platforms and devices.				
5	View multiple websites using various browsers and computing devices.				
6	Identify and solve coding errors throughout the design process.				
L. PUBLISHING AND MAINTAINING WEBSITES		0	1	2	3
1	Explain the domain naming system.				
2	Identify the process for obtaining a domain name, acquiring hosting, and uploading and maintaining a website.				
3	Research features and costs of domain name and hosting providers.				
M. CAREER DEVELOPMENT		0	1	2	3
1	Compare and contrast various job positions in the web design and development industry including compensation, required credentials, educational pathways, and work environment.				
2	Prepare an electronic portfolio of projects developed in the class.				