Georgia Department of Education

Information Technology Career Cluster
Web Design
Course Number: 11.45200

Course Description:

Can you think of any company that does not have a web presence? Taking this course will equip students will the ability to plan, design, and create a web site. Students will move past learning how to write code and progress to designing a professional looking web site using graphical authoring tools that contains multimedia elements. Working individually and in teams, students will learn to work with web page layout and graphical elements to create a professional looking web site.

Various forms of technologies will be used to expose students to resources, software, and applications of web design. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course.

Web Design is the third course in the Web & Digital Design pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Digital Technology and Digital Design. After mastery of the standards in this course, students should be prepared to take the end of pathway assessment in this career area.

Course Standard 1

IT-WD-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.
The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening

	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2   Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3   Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies

	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude

Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence L9-10RST 1-10 and L9-10WHST 1-10:
Georgia Standards of Excellence ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses.

Course Standard 2

IT-WD-2
Plan, develop, implement, and resolve ethical issues involved in creating and publishing a web site.

2.1 Define key terms in site development: cloud computing, versions of HTML, CSS, design consistency, deprecated tags, wire framing/layout design, hyperlinks.
2.2 Develop a logical argument for using cloud computing and the various web hosting platforms for business and personal use.
2.3 Describe and illustrate different versions of HTML and the development of HTML.
2.4 Describe the phases of web development (life cycle) and provide specific tasks for each phase.
2.5 Use flowcharts/storyboards to design a web site.
2.6 Identify essential web site navigation issues that help ensure site usability (consistency, intuitive text/icons, and breadcrumbs).
2.7 Describe ethical, government, and accessibility standards & W3C standards (readability, usability, browser compatibility, and copyright issues related to use of digital media).
2.8 Identify technologies available to enhance the user's experience, including programming languages and multimedia technologies.

Course Standard 3

IT-WD-3
Create documents using a variety of tags following coding practices commonly used to create web pages.

3.1 Identify basic HTML document (web page) layout & tags used to create web pages according to industry standards (e.g., header, footer, side bar, main content, navigation/menu bar, tabs/drop downs).
3.2 Demonstrate ability to create a web site utilizing the latest version of HTML (e.g., headings, paragraphs, breaks, lists, links, images, horizontal rules, divs).

3.3 Demonstrate ability to format text using proper tags set by the W3C (strong, emphasize).

3.4 Demonstrate ability to use tables to control the layout and appearance of data.

3.5 Demonstrate ability to create forms that accepts user inputs.

3.6 Demonstrate understanding of the importance of validating web sites and tools available for the process.

Course Standard 4

IT-WD-4
Create and use graphics to enhance web pages using a variety of tools.

4.1 Identify and use design and color principles appropriate for graphics and web pages.

4.2 Describe the image formats used within a web page (gif, jpg, png, image maps) and describe appropriate use of which format.

4.3 Add images to a web page to enhance meaning of web content.

4.4 Explore online tools and downloadable software available to create and edit still and animated graphics.

Course Standard 5

IT-WD-5
Define and apply essential aspects of the Cascading Style Sheets to format elements within a web site.

5.1 Use knowledge of how and why style sheets are used in web design to explain design elements of a web site.

5.2 Create and modify internal and external style sheets to format the styling of text, layout tables, content flow, positioning of objects.

5.3 Design web pages utilizing CSS to manage text flow using regions, columns, and graphical interfaces.

Course Standard 6

IT-WD-6
Use (Graphic User-Interface) GUI-based HTML editing software to create web sites.

6.1 Explain the differences between the types of editing software and when to editing software: text, object, and WYSIWYG (What You See Is What You Get).

6.2 Design web sites using a GUI-based editor following the design principles to enable navigation, usability, and accessibility.

6.3 Explore advanced layouts & scripting tools available through GUI-based editors such as widgets, image sliders, etc.

6.4 Create a website which implements tables.

6.5 Create and use interactive forms on a web site.

6.6 Design and implement layers, image maps, and navigation bars.

6.7 Enhance a website with media objects and images.

Course Standard 7

IT-WD-7
Develop an understanding of e-commerce practices and related technologies necessary to create a secure, useful interface to conduct business online.

- 7.1 Develop a working e-commerce vocabulary including e-business, mobile commerce, branding, market space, business model (B2B, B2C), security, payment options.
- 7.2 Explain the importance of branding and establishing a color palette for an e-business to create an online presence.
- 7.3 Explain the importance of using web design principles to meet customer expectations.
- 7.4 Explain the benefits of configuring a site to mobile standards currently used further the accessibility of an e-business.

Course Standard 8

IT-WD-8
Test, analyze, and identify performance issues related to publishing and maintaining web sites.

- 8.1 Identify essential issues in developing and maintaining a web site, including project management, testing, legal issues.
- 8.2 Identify strategies commonly used for managing a user's experience and improving site creativity and aesthetic qualities.
- 8.3 Explore options for publishing a web site and web hosting.
- 8.4 Identify the benefits and drawbacks of running your own web server versus using a service provider.
- 8.5 Plan and deliver oral presentations of a web site explaining the developmental process before, during, and after site completion to a potential customer.

Course Standard 9

IT-WD-9
Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

- 9.1 Explain the goals, mission, and objectives of Future Business Leaders of America.
- 9.2 Explore the impact and opportunities a student organization (FBLA) can develop to bring business and education together in a positive working relationship through innovative leadership and career development programs.
- 9.3 Explore the local, state, and national opportunities available to students through participation in related student organization (FBLA) including but not limited to conferences, competitions, community service, philanthropy, and other FBLA activities.
- 9.4 Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.
- 9.5 Explore the competitive events related to the content of this course and the required competencies, skills, and knowledge for each related event for individual, team, and chapter competitions.