# **WEB DESIGN**

MIS03 14022

Students in Web Design will be introduced to a variety of ways to create and maintain web pages. Course topics will focus on overall production processes with an emphasis on design elements involving layout, navigation, and interactivity. Understanding of proper ethics, copyright laws, social networking, and cyber security topics will be integrated. The basic language of web design and software will be taught along with the additional media inputs within a website (e.g. video, animation, sound, scrolling marquees, forms, contacts, and other additional components).

Credit ½ OR 1 credit

Max credit = 1

Level Grades 9-12

Prerequisite: Keyboarding or equivalent skill

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Standard
2.

## **BUSINESS LAW**

#### PROPERTY LAW

**Topic 2.5** Explain the legal rules that apply to personal property, real property, and intellectual property.

### **Student Competencies**

INTELLECTUAL PROPERTY

2.5.16 Identify the types of intellectual property (e.g., trademark, tradename, trade dress, copyright, patent, trade secret).

2.5.17 Describe how each type of intellectual property is created and legally protected.

<sup>-</sup>These are the standards/competencies taken from the larger Business Education document that are the bare minimum to be covered in the class in any school using this MIS03 code.

#### Standard INFORMATION TECHNOLOGY **DEVICES AND COMPONENTS** Describe current and emerging devices and components; configure, install, and upgrade equipment; diagnose problems; Topic 7.4 and repair hardware. **Student Competencies** Troubleshoot and diagnose applications and devices using appropriate resources (e.g., help desks, online help, 7.4.2 manuals). Compare and contrast various storage devices (e.g., local, removable, remote, cloud). 7.4.4 7.4.6 Troubleshoot and repair computer hardware and resolve related application problems. **OPERATING SYSTEMS** Identify, evaluate, select, install, use, upgrade, and customize operating systems. Diagnose and solve problems with Topic 7.5 various types of operating system utilities. **Student Competencies** 7.5.2 Manage local and cloud-based files and folders. WEB DEVELOPMENT AND DESIGN Design, develop, test, implement, update, and evaluate web solutions. Topic 7.9 **Student Competencies** 7.9.1 Identify and utilize various types of resources for web development. 7.9.2 Identify and apply appropriate design concepts. 7.9.3 Design and create web pages. Design and create websites incorporating digital media. 7.9.4 7.9.5 Publish websites on local and cloud-based web development platforms. 7.9.6 Identify client and target audience needs. Create content that is readable, accessible, searchable, and sticky. 7.9.7 Explain and use various Internet protocols. 7.9.8 7.9.9 Research and apply accessibility guidelines and laws affecting website design. 7.9.10 Assess website content in terms of organizational policies, inclusive practices, and federal and state laws. 7.9.11 Research and analyze hosting and domain name solutions. 7.9.12 Compare and contrast the features of web development applications and web content management systems. 7.9.13 Use digital media optimized for website integration. 7.9.14 Install and configure web development applications and plug-ins. Design, develop, and deliver advanced web content and applications using authoring tools. 7.9.15 Build dynamic web elements utilizing scripting, coding, and database integration. 7.9.16 7.9.17 Create a comprehensive website using industry design standards. Test, implement, and evaluate the website. 7.9.18 7.9.19 Analyze web server solutions and platforms.

	7.9.20	Plan, set up, and configure a web server.		
	7.9.21	Design e-commerce solutions.		
	7.9.22	Troubleshoot advanced server and site dilemmas.		
	7.9.23	Analyze work flow and project management procedures relevant to web design.		
	7.9.24	Build responsive websites to support all platforms (e.g., computer, mobile, tablet).		
	7.9.25	Develop organizational policy for website content and access.		
	7.9.26	Connect web servers to application servers for interoperability.		
	7.9.27	Obtain web development and design industry certification(s).		
PROJECT M	IANAGEMI	ENT AND SYSTEMS ANALYSIS		
<b>Topic 7.11</b>	Analyze an	d design projects and information systems using appropriate management and development tools.		
		Student Competencies		
	7.11.2	Use project management to complete projects across the curriculum.		
	7.11.3	Build timelines for projects.		
PROGRAMMING AND APPLICATION DEVELOPMENT				
<b>Topic 7.12</b>	Design, dev	velop, test, and implement programs and applications.		
Student Competencies				
	7.12.1	Identify and define programming terminology.		
	7.12.2	Demonstrate the ability to code using programming tools.		
	7.12.12	Test, debug, and document code.		
	7.12.13	Maintain and reengineer existing code.		
END-USER SUPPORT AND TRAINING				
<b>Topic 7.16</b>	Develop the	e technical and interpersonal skills and knowledge to train and support a diverse user community.		
		Student Competencies		
	7.16.5	Develop critical thinking skills to locate resources to solve problems.		
	7.16.6	Develop interpersonal skills.		
	7.16.7	Use information technologies to facilitate learning.		
	7.16.8	Explore online learning opportunities.		

Standard 9	MANAGEMENT				
TECHNOLOGY AND INFORMATION MANAGEMENT					
Topic 9.9	Utilize information and technology tools to conduct business effectively and efficiently.				
Student Competencies					
	E-BUSINESS				
	9.9.7	Explore e-commerce websites.			
	9.9.9	Explain how successful e-business systems depend upon much more expertise than just technical skill in website			
		design.			
	9.9.10	Evaluate an e-business website.			