

Web Development

Career Cluster	Information Technology
Course Code	10201
Prerequisite(s)	Foundations of Technology (recommended) Introduction to Information Technology (recommended) Computer Science Essentials (recommended)
Credit	.5-1
Program of Study and Sequence	Web Development is an option inside the Programming Pathway.
Student Organization	SkillsUSA, Future Business Leaders of America, CyberPatriots
Coordinating Work-Based Learning	Job Shadowing, Informational Interviews, Tours
Industry Certifications	None
Dual Credit or Dual Enrollment	TBD
Teacher Certification	Information Technology Cluster Endorsement; Web & Digital Communications Pathway Endorsement; Arts, AV Technology & Communications Cluster Endorsement; K-12 Educational Technology Endorsement; K-12 Classroom Technology Endorsement
Resources	

Course Description:

Web Development I is a course designed to guide students in a project-based environment implementing web development techniques. Using hypertext markup language (HTML5) coding and Cascading Style Sheets (CSS) students will plan, design, develop, deploy, and maintain website projects. Students will learn fundamentals for a career in web development as they complete projects and create their own website.

Program of Study Application: Web Development is an option inside the Programming Pathway.

Note:

All Web Development standards integrate aspects of language arts and mathematics.

Course Standards

INDICATOR # WD 1. Identify basic principles of how the Internet is constructed, how it functions and how it is used.		
<i>Webb Level</i>	<i>Sub-Indicator</i>	<i>Integrated Content</i>
Level 1: Recall	WD 1.1 Identify the infrastructure required to access the Internet.	
Level 1: Recall	WD 1.2 Summarize Internet development and functions.	
Level 1: Recall	WD 1.3 Recognize the purpose of domains.	
Level 2: Skill/Concept	WD 1.4 Define the function of a Domain Name Server (DNS).	
Level 1: Recall	WD 1.5 Define important Internet communications protocols and their roles in delivering basic Internet services.	
Level 1: Recall	WD 1.6 Demonstrate knowledge of standard copyright rules.	
Level 2: Skill/Concept	WD 1.7 Explain the use and purpose of acceptable use policy (AUP).	

INDICATOR # WD 2. Demonstrate creation of web pages.

<i>Webb Level</i>	<i>Sub-Indicator</i>	<i>Integrated Content</i>
Level 2: Skill/Concept	WD 2.1 Demonstrate knowledge required to create a web page.	
Level 2: Skill/Concept	WD 2.2 Demonstrate appropriate file structure and naming.	
Level 2: Skill/Concept	WD 2.3 Create web pages with appropriate HTML structure and standards that can be validated using World Wide Web Consortium validator (W3C).	
Level 3: Strategic Thinking	WD 2.4 Demonstrate the use of elements and attributes.	
Level 2: Skill/Concept	WD 2.5 Incorporate meta tags for page documentation and search engine optimization (SEO).	

INDICATOR # WD 3. Format web pages using Cascading Style Sheets (CSS).

<i>Webb Level</i>	<i>Sub-Indicator</i>	<i>Integrated Content</i>
Level 2: Skill/Concept	WD 3.1 Apply essential aspects of the CSS.	
Level 2: Skill/Concept	WD 3.2 Apply CSS to a website.	
Level 3: Strategic Thinking	WD 3.3 Use basic selectors in a CSS.	

INDICATOR # WD 4. Plan, design, implement, and maintain website(s).

<i>Webb Level</i>	<i>Sub-Indicator</i>	<i>Integrated Content</i>
Level 2: Skill/Concept	WD 4.1 Analyze project requirements.	
Level 3: Strategic Thinking	WD 4.2 Plan site design and page layout.	
Level 4: Extended Thinking	WD 4.3 Create basic content for website.	
Level 4: Extended Thinking	WD 4.4 Edit and revise a site.	

INDICATOR # WD 5. Explore careers in Web Development.		
<i>Webb Level</i>	<i>Sub-Indicator</i>	<i>Integrated Content</i>
Level 2: Skill/Concept	WD 5.1 Explore Information Technology (IT) Web Development careers.	
Level 2: Skill/Concept	WD 5.2 Demonstrate job skills for programming industries.	