2023 Web Design II

The Research and Curriculum Unit (RCU), located in Starkville, as part of Mississippi State University (MSU), was established to foster educational enhancements and innovations. In keeping with the land-grant mission of MSU, the RCU is dedicated to improving the quality of life for Mississippians. The RCU enhances intellectual and professional development of Mississippi students and educators while applying knowledge and educational research to the lives of the people of the state. The RCU works within the contexts of curriculum development and revision, research, assessment, professional development, and industrial training.

Table of Contents

Acknowledgments

The Web Design II curriculum was presented to the Mississippi State Board of Education on February 16, 2023. The following Board members were serving on the state Board at the time:

Standards

Some standards and alignment crosswalks are referenced in the appendix. Depending on the curriculum, these crosswalks should identify alignment to some of the standards mentioned below, as well as possible related academic topics as required in the Subject Area Testing Program in Algebra I, Biology I, English II, and U.S. History from 1877, which could be integrated into the content of the units. Mississippi's Web Design II curriculum is aligned to the following standards:

National Standards for Business Education
The National Business Education Association (NBEA) has created standards to introduce students to the basics of personal finance, the decision-making techniques needed to be wise consumers, the economic principles of an increasingly global marketplace, and the processes by which businesses operate. In addition, these standards provide a solid educational foundation for students who want to successfully complete college programs in various business disciplines. *NBEA Business Education Library* (2020).
nbea.org

International Society for Technology in Education Standards (ISTE)
Reprinted with permission from *ISTE Standards for Students* (2016). All rights reserved. Permission does not constitute an endorsement by ISTE.
iste.org

College- and Career-Ready Standards
College- and career-readiness standards emphasize critical thinking, teamwork, and problem-solving skills. Students will learn the skills and abilities demanded by the workforce of today and the future. Mississippi adopted Mississippi College- and Career-Readiness Standards (MCCRS) to provide a consistent, clear understanding of what students are expected to learn and so teachers and parents know what they need to do to help them.
mdek12.org/oae/college-and-career-readiness-standards

Framework for 21st Century Learning
In defining 21st-century learning, the Partnership for 21st Century Skills has embraced key themes and skill areas that represent the essential knowledge for the 21st century: global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; health literacy; environmental literacy; learning and innovation skills; information, media, and technology skills; and life and career skills. 21 *Framework Definitions* (2019).
battelleforkids.org/networks/p21/frameworks-resources

Executive Summary

Pathway Description

The Web Design II curriculum includes elements that will help contribute to student success in web design-related careers. Students will research career avenues in web design, apply HTML and CSS concepts, and utilize web design applications, software, and advanced concepts. Web Design I is a prerequisite for Web Design II.

Applied Academic Credit

The latest academic credit information can be found at
mdek12.org/ese/approved-course-for-the-secondary-schools.

Teacher Licensure

The latest teacher licensure information can be found at
mdek12.org/oel/apply-for-an-educator-license.

Professional Learning

If you have specific questions about the content of any of training sessions provided, please contact the RCU at 662.325.2510.

Course Outlines

One 1/2-Carnegie Unit Course

This curriculum consists of one 1/2-credit course.

Web Design II—Course Code: 110706

Unit	Title	Hours
1	Careers in Web Design	5
2	HTML	15
3	Cascading Style Sheets (CSS)	25
4	Web Development Applications, Software, and Advanced Concepts	25
Total		**70**

Unit 1: Careers in Web Design

Competencies and Suggested Objectives

1. Explore career opportunities in web design. [DOK2]
   a. Identify and discuss the impact of web design in various careers.
   b. Examine education, experience, skills, and personal requirements for careers in web design.
   c. Research career opportunities and emerging fields in web design.

Unit 2: HTML

Competencies and Suggested Objectives
1. Review design factors and basic elements of web design. [DOK1]
2. Review the basic elements of HTML. [DOK1]

3. Discuss and utilize advanced concepts of HTML. [DOK3]
    a. Differentiate between logical inline tags and physical inline tags.
    b. Discuss and incorporate the use of block-level HTML elements and inline HTML elements.
    c. Utilize advanced concepts in designing a web page.

4. Research the purpose of Cascading Style Sheets (CSS) in HTML. [DOK2]

Unit 3: Cascading Style Sheets (CSS)

Competencies and Suggested Objectives
1. Define Cascading Style Sheets (CSS). [DOK1]
2. Differentiate between the types of CSS (e.g., inline, internal, external). [DOK2]

3. Define and utilize the different CSS selectors (e.g., id, class, HTML tag). [DOK4]
   a. Apply a CSS rule to an HTML tag.
   b. Apply a CSS rule by using an id selector.
   c. Apply a CSS rule by using a class selector.

4. Identify common properties of CSS (e.g., font, color, background, text, etc.). [DOK2]
5. Use HTML and CSS concepts in designing a website. [DOK4]

Unit 4: Web Development Applications, Software, and Advanced Concepts

Competencies and Suggested Objectives
1. Determine the applications and software available for web development. [DOK1]   a. Compare and contrast the features of different applications and software.

2. Apply learned skills to design and create a website using available software or applications. [DOK4]
 	
   a. Create a storyboard and wireframe.
   b. Present the idea to peers to obtain constructive feedback.
   c. Create a home page.
   d. Develop a website from a homepage.
   e. Use HTML and CSS to edit the website where needed.

3. Test, implement, and evaluate the website. [DOK4]
4. Explore the use of plug-ins, digital media integration, and other advanced concepts in web design. [DOK2]

Appendix: National Standards for Business Education

National Standards for Business Education Crosswalk for Web Design II						
	Units	**1**	**2**	**3**	**4**	
Standards						
IT.WDD.9.1			X	X	X	
IT.WDD.9.2			X	X	X	
IT.WDD.9.3			X	X	X	
IT.WDD.9.4			X	X	X	
IT.WDD.9.5					X	
IT.WDD.9.6			X	X	X	
IT.WDD.9.7			X	X	X	
IT.WDD.9.8			X	X	X	
IT.WDD.9.9			X	X	X	
IT.WDD.9.10			X	X	X	
IT.WDD.9.11						
IT.WDD.9.12						
IT.WDD.9.13			X	X	X	
IT.WDD.9.14					X	
IT.WDD.9.15			X	X	X	
IT.WDD.9.16						
IT.WDD.1.17			X	X	X	
IT.WDD.1.18			X	X	X	

Information Technology

IT. WDD.9 Web Development and Design

1. Identify and utilize various types of resources for web development.
2. Identify and apply appropriate design concepts.
3. Design and create web pages.
4. Design and create websites incorporating digital media.
5. Publish websites on local and cloud-based web development platforms.
6. Identify client and target audience needs.
7. Create content that is readable, accessible, searchable, and sticky.
8. Explain and use various internet protocols.
9. Research and apply accessibility guidelines and laws affecting website design.
10. Assess website content in terms of organizational policies, inclusive practices, and federal and state laws.
11. Research and analyze hosting and domain name solutions.

12. Compare and contrast the features of web development applications and web content management systems.
13. Use digital media optimized for website integration.
14. Install and configure web development applications and plug-ins.
15. Design, develop, and deliver advanced web content and applications using authoring tools.
16. Build dynamic web elements utilizing scripting, coding, and database integration.
17. Create a comprehensive website using industry design standards.
18. Test, implement, and evaluate the website.