

Web Design

Grades 10-12

Units of Credit: One Semester (Elective)

Prerequisites: Recommended Digital Media

Course Description:

This course presents introductions to many of the basic concepts, issues and techniques related to designing, developing and deploying Web sites. During the course, students will learn about Web design, HTML, XHTML, Dynamic HTML, and Cascading Style Sheets (CSS). Students will learn how to create sites both manually and through the use of Web site development software. This course includes the basics of designing and creating Flash animations on Web sites using industry standard commercial software tools. Appropriate uses of animation are taught as part of the total Web design solution. Some topics covered include character design, creation and motion, tweening, effects and storyboarding.

Topics:

- Ethics/Online Safety and Digital Responsibility
- Website Evaluations
- Web Based Applications
- HTML, XHTML
- CSS
- Flash
- Dreamweaver

NOTE: Throughout this document, learning target types are identified as knowledge (“K”), reasoning (“R”), skill (“S”), or product (“P”).

STANDARD 1: Students experience various career opportunities and assess personal career pathways.

Benchmark 1:

Explore and identify personal interests, aptitudes, and abilities and develop strategies to achieve tentative career goals.

Learning Targets (Type):

1. I can use Montana Career Information Systems (MCIS) and/or other systems or web resources to investigate and evaluate my personal interests, aptitudes and abilities. (S,R)
2. I can formulate tentative career goals. (R)
3. I can evaluate approaches for meeting my goals. (R)
4. I can identify my personal goals and values. (K)
5. I can identify my personal strengths and weaknesses. (K)

Benchmark 2:

Utilize local resources to research career plans.

Learning Targets (Type):

1. I can identify local resources to develop career plans. (K)

2. I can contact my school career counselor or teacher to pursue career pathways. (S)

Benchmark 3:

Recognize the interrelationships of family, community, career, and leisure roles.

Learning Targets (Type):

1. I can describe the importance of balance between family and community in regards to career and leisure activities. (K)
2. I can compare and contrast the needs of career and leisure activities and how they relate to and/or affect family and community. (R)
3. I can identify child development theories and their implications for educational and childcare practices. (K, R)
4. I can analyze cultural and environmental influences when assessing children's development. (R)
5. I can analyze abilities and needs of children and their effects on children's growth and development. (R)
6. I can identify appropriate guidelines for positive interactions with children. (K)
7. I can identify changes in family roles and family types. (K)
8. I can interpret the family life cycle/roles of parents. (R)
9. I can define and identify ways parenting skills can be developed. (K)
10. I can evaluate factors to consider in determining personal preparedness for parenthood: (i.e., biological, social, emotional, financial, and educational.) (R)
11. I can evaluate the demands and rewards of parenting. (R)

STANDARD 2: Students demonstrate an understanding and apply principles of Resource Management (i.e., financial, time, personal management)

Benchmark 1:

Prepare a budget and keep financial records.

Learning Targets (Type):

1. I can research and report cost of materials and time. (S)
2. I can document financial inputs and outputs. (S)
3. I can identify the necessity to maintain accurate financial records. (K)
4. I can apply and stay within a fixed budget. (S)
5. I can identify the costs involved with prenatal care, childbirth, and the first year of life. (K)

Benchmark 2:

Prioritize, allocate time, prepare and follow schedules to complete a project.

Learning Targets (Type):

1. I can estimate the required time to complete a project. (S)
2. I can prioritize resources, equipment and tasks. (S)
3. I can reflect upon completion. (S)

Benchmark 3:

Apply appropriate time to task.

Learning Targets (Type):

1. I can implement a time schedule for task completion. (S)

Benchmark 4:

Use physical resources wisely to accomplish a goal.

Learning Targets (Type):

1. I can identify the resources necessary to accomplish the task. (K)

2. I can maintain the tools of the trade. (S)
3. I can maximize the use of my resources (S).
4. I can investigate the costs of birth defects to family and society. (S)

STANDARD 3: Students acquire and utilize personal and leadership skills to become successful, productive citizens.

Benchmark 1:

Demonstrate active leadership skills by participation in group activities and projects.

Learning Targets (Type):

1. I can investigate various leadership styles. (S)
2. I can apply leadership styles in group activities and projects. (S)

Benchmark 2:

Demonstrate positive personal and work ethics.

Learning Targets (Type):

1. I can show up for class and work on time. (S)
2. I can develop personal and work related goals. (S)
3. I can describe ethical behavior in the workplace. (K)

Benchmark 3:

Demonstrate skills to be a productive citizen.

Learning Targets (Type):

1. I can develop professional relationships with community members. (S)
2. I can contribute to my community in a positive manner. (S)

Benchmark 4:

Apply self-esteem building practices.

Learning Targets (Type):

1. I can define and provide evidence of my strengths in my career interest areas. (K)
2. I can persevere through set backs and stay focused on my goals. (S)

Benchmark 5:

Demonstrate appreciation for diverse perspective needs and characteristics.

Learning Targets (Type):

1. I can develop a working relationship with diverse populations. (S)
2. I can demonstrate communication skills that contribute to positive relationships. (S)
3. I can work to understand diverse points of view. (S)
4. I can participate in classroom discussions while respecting diverse opinions. (S,R)

Benchmark 6:

Practice several methods of effective communication.

Learning Targets (Type):

1. I can demonstrate good listening skills. (S)
2. I can effectively communicate verbally through collaborative projects. (S)
3. I can develop quality written professional communications. (S)
4. I can model and demonstrate appropriate communication skills. (S)

Standard 4: Students acquire and demonstrate current technical skills leading to an occupation.

Benchmark 1:

Practice technical skills and procedures required for an occupation.

Learning Targets (Type):

1. I can identify and evaluate the basic design principals. (K)
2. I can identify and evaluate the steps in designing a website. (K,R)
3. I can identify the principles of good design in a website. (K,R)
4. I can create and use basic animation. (K,R,S,P)
5. I can create and use slices. (K,R,S,P)
6. I can create, use, and optimize rollovers. (K,R,S,P)
7. I can create and use a navigation bar. (K,R,S,P)
8. I can create and use an image map. (K,R,S,P)
9. I can identify and create HTML codes needed to create a web page. (K,R,S,P)
10. I can evaluate, identify, and repair HTML code in the creation process. (K,R,S,P)
11. I can make, modify, and use selections. (K,R,S,P)
12. I can edit and retouch an image. (K,R,S,P)
13. I can work with filters and layers. (K,R,S,P)
14. I can utilize basic color correction functions. (K,R,S,P)
15. I can optimize graphics/images for web page. (K,R,S,P)
16. I can use a template to create a website. (K,R,S,P)
17. I can create and use tables, a photo gallery, images, and navigation bar. (K,R,S,P)
18. I can design web pages using layout tables. (K,R,S,P)
19. I can create a web page, modify page properties, and publish a website. (K,R,S,P)
20. I can add and manually format text, apply element tags, create and modify an embedded internal and external style sheet. (K,R,S,P)
21. I can use hyperlinks, rollovers, and image maps effectively. (K,R,S,P)

Benchmark 2:

Practice safe and appropriate use of technology.

Learning Targets (Type):

1. I can identify the origins of the Internet and the World Wide Web. (K)
2. I can identify the differences between major web browsers. (K,R)
3. I can recite the basic development of the Internet, web, and vocabulary related thereto. (K)

Benchmark 3:

Select the appropriate tools, equipment, and procedures for the task.

Learning Targets (Type):

1. I can demonstrate the importance of planning and organizing information. (K,R)
2. I can explain and practice appropriate procedures for completing complex tasks relating to a digital environment. (K,R)

Benchmark 4:

Manage and maintain technological tools and follow troubleshooting protocol.

Learning Targets (Type):

1. I can create, maintain, and navigate folders and establish file/folder naming procedures. (K,R)
2. I can use and establish a repertoire of skills and procedures as needed to operate various technologies. (K,R)
3. I can demonstrate competence with basic system and tool set-up, technical terminology, basic care, and maintenance. (K,R)
4. I can use and refine troubleshooting strategies to resolve technical operations problems. (K,R)
5. I can apply sophisticated skills and strategies to enhance performance and ease task completion. (K,R,S)

6. I can create a portfolio of original work using various technologies. *(K,R,S,P)*

Benchmark 5:

Apply technical information to a variety of sources.

Learning Targets (Type):

1. I can create a website for an authentic audience using a variety of sources. *(K,R,S,P)*
2. I can define different media types and different file extensions to appropriately apply these to a website. *(K,R)*

STANDARD 5: Students know and demonstrate the requirements of the workplace through authentic application.

Benchmark 1:

Practice and demonstrate academic and technical skills to a workplace setting.

Learning Targets (Type):

1. I can practice, and demonstrate my technical workplace skills in my school lab. *(S)*
2. I can research, write and present on the technical content utilizing academic skills found in workplace settings. *(S)*

Benchmark 2:

Apply the concepts of entrepreneurship.

Learning Targets (Type):

1. I can explain the concepts of entrepreneurship. *(K)*
2. I can demonstrate the concepts of entrepreneurship through a unique project. *(S)*
3. I can present my unique project to an authentic audience. *(S)*

Benchmark 3:

Identify possible outcomes and consequences of decisions.

Learning Targets (Type):

1. I can identify possible consequences of carelessness and horseplay. *(K)*
2. I can explain potential outcomes of not following directions, (i.e. safety, guidelines, rubrics). *(K)*

Benchmark 4:

Use acceptable industry standard equipment in a school setting.

Learning Targets (Type):

1. I can successfully use acceptable industry standard equipment to produce an authentic product within budget constraints. *(S)*