

BILLINGS PUBLIC SCHOOLS
WEB PAGE 2
Learner Objectives

MISSION STATEMENT

The Career Center is dedicated to providing Billing's area students with an education that explores and enhances vocational and academic skills to promote critical thinking, self-discipline, and responsible citizenship.

PHILOSOPHY

It is the philosophy of the Web Design program to give students an understanding of technology and graphic design as it relates to the web. Students will be given the opportunity to explore concepts through project based activities. All activities are strictly based on industry, national, state and local standards. Through the effective integration of technology into the classroom the learning environment moves from teacher-centered instruction to student-centered learning. This approach combined with increased student responsibility allows for a higher rate of student success. Since Web Design is a career with an accelerated rate of change students develop life-long learning habits. Students will also develop skills to enhance productivity and be able to select the best technology to a given problem.

LEARNING DOMAINS

- I. Students will demonstrate understanding of a server-sided web programming language.**
- II. Students will demonstrate understanding of how to use a data base to create dynamic web content.**
- III. Students will demonstrate understanding of how to make a simple content management system.**
- IV. Students will demonstrate understanding of advanced web design techniques.**
- V. Students will demonstrate understanding of advanced layout and development techniques.**
- VI. Students will demonstrate understanding of advanced graphic/photo creation and manipulation.**
- VII. Students will demonstrate understanding of how to set up a domain name and site hosting.**
- VIII. Students will apply advanced skills, critical thinking and professionalism when dealing with a client or clients.**
- IX. Students will demonstrate understanding of portfolio design and the importance of keeping a record of previous jobs.**

BILLINGS PUBLIC SCHOOLS
WEB PAGE 2
Learner Objectives

- I. Students will demonstrate understanding of a server-sided web programming language.**
 - 1. Students will demonstrate understanding of how server-sided programming languages function.
 - 2. Students will demonstrate understanding of how to set-up and maintain settings on a local testing server.
 - 3. Students will demonstrate understanding of code formatting and proper syntax.
 - 4. Students will demonstrate understanding of commonly used tags and methods of programming with a server-sided web language.

- II. Students will demonstrate understanding of how to use a data base to create dynamic web content.**
 - 1. Students will demonstrate understanding of how to create and format a data base.
 - 2. Students will demonstrate understanding how to display information from a data base to a web page.
 - 3. Students will demonstrate understanding how to insert information into a data base from a web page.

- III. Students will demonstrate understanding of how to make a simple content management system.**
 - 1. Students will demonstrate understanding of creating a backend control panel for web site content management.
 - 2. Students will learn and observe how to create and manage security associated with content management.

- IV. Students will demonstrate understanding of advanced web design techniques**
 - 1. Students will demonstrate understanding of creating advanced custom vector graphics.
 - 2. Students will demonstrate understanding of how to create fluid dynamic web site design elements.

- V. Students will demonstrate understanding of advanced layout and development techniques**
 - 1. Students will demonstrate understanding of various ways to layout and develop web sites.
 - 2. Students will demonstrate understanding of how to create fluid dynamic web site layouts.
 - 3. Students will demonstrate understanding of various text formatting tools.

BILLINGS PUBLIC SCHOOLS
WEB PAGE 2
Learner Objectives

- VI. Students will demonstrate understanding of advanced graphic/photo creation and manipulation.**
1. Students will demonstrate understanding of fixing poorly taken photos.
 2. Students will demonstrate understanding of using vector drawing tools.
- VII. Students will demonstrate understanding of how to set up a domain name and site hosting.**
1. Students will demonstrate understanding of how to select a proper domain name.
 2. Students will demonstrate understanding of how to select a proper hosting provider and hosting package for a client.
 3. Students will observe and learn how to purchase domain names and web hosting.
- VIII. Students will apply advanced skills, critical thinking and professionalism when dealing with a client or clients**
1. Students will demonstrate understanding of soft skills required to plan and implement the needs of a client.
 2. Students will learn and observe how to create a simple contract for work.
 3. Students will participate in mock-client meetings.
 4. Students will create presentations to explain and outline complicated concepts to the lay person.
- IX. Students will demonstrate understanding of portfolio design and the importance of keeping a record of previous jobs.**
1. Students will maintain a portfolio of their work.
 2. Students will observe and learn the importance of presenting previous work to potential clients.

DELIVERY AND INTEGRATION

Week 1-2 – Administrative - expectations - course pre-test. Students will do a quick design project with notes directly from a client. Students will be introduced to how to select domain names and how to check availability. Evaluation – participation and product evaluation.

Week 3 – Students will learn how to configure their local ColdFusion testing server. Introduction to ColdFusion tag formatting. Evaluation – participation, product and quizzes.

Week 4-5 - Students will be working on paper and on a computer to learn how to program using ColdFusion. They will also begin to understand the frame of mind it takes to think like a programmer. Evaluation – participation, product and quizzes.

BILLINGS PUBLIC SCHOOLS
WEB PAGE 2

DELIVERY AND INTEGRATION

Week 6 – Students will be introduced to database integration/interaction and creations of databases. Evaluation – Unit Test and product evaluation.

Week 7-9 – Students will learn and implement advanced web design techniques guided by a mock client. Web sites will be more demanding and complicated than Web Design 1, allowing students to complete the whole process. Students will also go through peer and client reviews. Evaluation – participation, product and quizzes.

Week 10-11 – Students will learn advanced development, layout and formatting methods to begin developing their web sites designed in the previous weeks. Some of the content will be dynamically controlled by a database. Students will use skills learned previously to create this web site. Evaluation – participation, product and quizzes

Week 12 – Students will start creating their portfolios. Students will be required to research methods of creating a digital portfolio. Go through the design and peer review process and then develop their portfolios following constraints they choose. Evaluation – participation, peer product evaluation and quizzes

Week 13-14 – Students will implement skills learned earlier to create the backend control panel for the web site they designed. The control panel will manage content for the front-end of the web site. Evaluation – participation, product and quizzes

Week 15-17 – Students will be required to work in teams and select a real world web job. This job can be done for another teacher a friend or parent. The teacher will also line up potential non-profit web jobs for students to select from. They will write a contract/proposal for the work to be completed, create design options, setup hosting and domain names and develop the web site completely. Evaluation – participation, product, client review and quizzes

Week 18-19 – Review/finals.
Finals/ post-test.