

COURSE TITLE: Interactive Web Design

YEAR: 2017-2018

INSTRUCTOR: Stacy Dolderer

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I. COURSE DESCRIPTION:

This course focuses on the skills and concepts necessary to create effective and responsive Web pages that include links, graphics, sound, movies, tables, forms, and style sheets using common editors. It also stresses the effective use of search engine optimization, Section 508 compliance, buying a domain name and acquiring a hosting server. Various utilities, such as FTP and graphics editing software, will also be examined and utilized.

II. COURSE MATERIALS:

Required Software and Supplies:

- Core FTP (<http://www.coreftp.com/download.html>)
- Notepad ++ (<http://notepad-plus-plus.org/download/v6.5.3.html>)
- Reliable Computer and Internet Connection (have a backup computer ready, in emergencies)
- Browsers: Chrome, Firefox and Internet Explorer
- Microsoft Office (Libre Office or Google Docs is also acceptable)

III. COURSE OBJECTIVES:

There is a growing demand in the Web development industry for competent individuals to design, build and maintain cohesive and responsive Web sites. Students will demonstrate the ability to conceptualize, design, display and produce Web pages demonstrating an in-depth knowledge of the technology and software applications used to create them. This will allow students to meet the various needs of client or company Web site endeavors. Students will complete the course, with a course grade of “C-” or better, by:

- Mastering a basic set of HTML terminology, techniques, and “tags” while practicing skills that will allow them to create and publish original Web pages for a variety of uses;
- Researching, modeling, implementing, and presenting to the class additional techniques that may be encouraged to add to a Web construction “bag of tricks”;
- Construct Web pages with text and Web editors;
- Analyze design strengths and weaknesses in notable Web sites in order to develop appropriate and original design styles; and
- Plan, layout, and construct a “Special Interest” Web site.

IV. COURSE OUTLINE:

- I. Unit 1: Designing and Planning Web Pages
- II. Unit 2: Creating Pages with HTML
- III. Unit 3: Formatting Web Pages with Style Sheets
- IV. Unit 4: Graphics
- V. Unit 5: Scripting
- VI. Unit 6: Quality Control
- VII. Unit 7: Website Management and Authoring Tools
- VIII. Unit 8: Client Website

Project: The final “Special Interest Website” project is NOT step-by-step. This project will test your research, brainstorming, design, creativity and Web development skills. It will also assess how you are following directions and gathering additional knowledge beyond the classroom. This project will be accompanied by a rubric with the project description, the specifications, and a checklist of criteria for the project.

V. COURSE CALENDAR:

- I. Week 1-2: Unit 1: Designing and Planning Web Pages
 - a. Module 1: Basic Site Evaluation and Rubric Creation
 - i. Lesson 1: Surveying the Possibilities
 - ii. Lesson 2: Developing a Website Evaluation Tool
 - b. Module 2: Color Theory
 - i. Lesson 1: Color Theory in Web Design
 - c. Module 3: Web Standards & Accessible Design
 - i. Lesson 1: Web Standards
 - ii. Lesson 2: How People with Disabilities Access the Web
 - d. Module 4: Planning a Website
 - i. Lesson 1: Organizing a Website
- II. Week 3-4: Unit 2: Creating Pages with HTML
 - a. Module 1: Pre-Coding
 - i. Lesson 1: Pre-Coding
 - b. Module 2: Basic HTML Markup
 - i. Lesson 1: HTML Syntax
 - ii. Lesson 2: Essential Tags
 - iii. Lesson 3: Common Tags
 - c. Module 3: HTML Lists
 - i. Lesson 1: Lists
 - ii. Lesson 2: Creating a Navigation Menu
 - d. Module 4: Creating Links
 - i. Lesson 1: Linking to External Internet Sites

- ii. Lesson 2: Linking to Pages Within Your Website
 - iii. Lesson 3: Special Types of Links
 - e. Module 5: Creating a Data Table
 - i. Lesson 1: Creating a Data Table
 - f. Module 6: HTML Video
 - i. Lesson 1: Adding Video to Web Pages
 - ii. Lesson 2: Adding Captions to Videos
- III. Week 5-6: Unit 3: Formatting Web Pages with Style Sheets
 - a. Module 1: Introduction to Cascading Style Sheets
 - i. Lesson 1: Anatomy of a Style
 - ii. Lesson 2: Applying Styles
 - iii. Lesson 3: Linking to an External Style Sheet
 - b. Module 2: Color in CSS
 - i. Lesson 1: Understanding Color in CSS
 - ii. Lesson 2: Applying Color in CSS
 - c. Module 3: Typography in CSS
 - i. Lesson 1: Understanding Typography in CSS
 - ii. Lesson 2: Applying Typography in CSS
 - d. Module 4: The Box Model in CSS
 - i. Lesson 1: Understanding The Box Model in CSS
 - ii. Lesson 2: Applying The Box Model in CSS
 - e. Module 5: The Role of ID and Class in CSS
 - i. Lesson 1: Understanding ID and Class in CSS
 - ii. Lesson 2: Applying ID and Class in CSS
 - iii. Lesson 3: Pseudo-class Selectors in CSS
 - f. Module 6: Page Layout Techniques
 - i. Lesson 1: Page Layout with CSS
 - ii. Lesson 2: Stylizing a Navigation Menu with CSS
- IV. Week 7-8: Unit 4: Graphics
 - a. Module 1: Introduction to Web Graphics
 - i. Lesson 1: Introduction to Web Graphics
 - ii. Lesson 2: Copyright Law and Graphics on the Web
 - b. Module 2: Creating a Web Photo Album
 - i. Lesson 1: Understanding Web Graphics
 - ii. Lesson 2: Acquiring Images for Web Graphics
 - iii. Lesson 3: Cropping and Resizing
 - iv. Lesson 4: Adding Images to Your Web Page
 - c. Module 3: Creating a Button
 - i. Lesson 1: Basic Shapes and Colors
 - ii. Lesson 2: Working With Layers
 - iii. Lesson 3: Optimizing GIF Images
 - iv. Lesson 4: Creating a Favicon

- d. Module 4: Creating a Web Page Banner
 - i. Lesson 1: Selection Tools
 - ii. Lesson 2: Layer Effects and Blending
 - iii. Lesson 3: Background Images
- V. Week 9-10: Unit 5: Scripting
 - a. Module 1: Overview of Scripting on the Web
 - i. Lesson 1: Client-side vs. Server-side Scripting
 - b. Module 2: JavaScript
 - i. Lesson 1: Using JavaScript to Show an Alert
 - ii. Lesson 2: JavaScript Errors and Debugging
 - iii. Lesson 3: Building a JavaScript Clock Part 1
 - iv. Lesson 4: Building a JavaScript Clock Part 2
 - v. Lesson 5: Using JavaScript to Hide and Show Content
 - vi. Lesson 6: Building a Custom Video Player
- VI. Week 11: Unit 6: Quality Control
 - a. Module 1: Validating Websites
 - b. Lesson 1: Validating Your HTML
 - c. Lesson 2: Validating Your CSS
 - d. Lesson 3: Validating Your Accessibility
 - e. Module 2: Testing Usability
 - f. Lesson 1: Conducting a Usability Test
- VII. Week 12: Unit 7: Website Management and Authoring Tools
 - a. Module 1: Web Authoring Software
 - i. Lesson 1: Basic Features of Web Authoring Software
 - ii. Lesson 2: Content, Structure, Presentation, and Behavior
 - iii. Lesson 3: Site Management Features
 - b. Module 2: Publishing on the Web
 - i. Lesson 1: Website Hosting Services
 - ii. Lesson 2: Website Publishing Tools
- VIII. Final Project: Client Website
 - a. Lesson 1: Planning the Client Website
 - b. Lesson 2: Constructing the Client Website
 - c. Lesson 3: Quality Control of the Client Website

VI. COURSE EVALUATION:

Final Project

Mechanics	35%
Design.....	30%
Content.....	15%

Overall Grade Evaluation

Attendance.....	10%
Quizzes	10%
Exercises.....	30%
Final Project.....	50%

VII. LEARNING OUTCOMES

ALIGNS WITH THE FOLLOWING PROGRAM/DEGREE/DIVISION OUTCOMES GD: GRAPHIC DESIGN WEB: WEB DESIGN	TYPE OF COURSE OBJECTIVE: INTRODUCTORY, REINFORCE, OR EMPHASIZE		Great Falls College ABILITIES	
	Develop a basic set of HTML terminology, techniques, and "tags" as they practice skills that will allow them to create and publish original Web pages for a variety of uses.	GD: 1, 4	Web: 1, 2	Introductory, Reinforce and Emphasize
Research, model, implement, and present to the class additional techniques that they added to their "Special Interest Website".	GD: 2, 3, 4	Web: 5, 2, 3	Reinforce	A1, A3, A6, A7
Construct Web pages with text and Web editors.	GD: 1, 3	Web: 1, 4, 6	Introductory, Reinforce and Emphasize	A2, A3, A6
Analyze design strengths and weaknesses in notable	GD:	Web:	Introductory	

Web sites in order to develop appropriate and original design styles for various Web clients.	3, 4	5, 4		A1, A4, A5, A7, A8
Plan, layout, and construct a "Special Interest" Website.	GD: 1, 3, 4, 6, 7	Web: 1, 2, 3, 4, 5	Introductory and Reinforce	A1, A3, A4, A5, A6, A7

Graphic Design Degree Outcomes

1. Create appropriate typographic solutions for a variety of applications and situations;
2. Decide the correct medium (printed materials, packages, manufacturing and fabrication techniques, environments, Websites, kiosks, or virtual environments) based on use and overall intended effect on the viewer;
3. Utilize aesthetics (principles of organization, composition, color, hierarchy, balance, contrast, emphasis, depth, rhythm, use of symbolism and overall level of craft in execution) to create an emotional impact;
4. Maintain a structured approach to creative process development (research, observation, analysis, prototyping, testing, evaluation) while remaining flexible and adapting to changing circumstances and parameters and giving rigorous and unfailing attention to detail;
5. Work with diverse teams (clients, audiences, content providers, researchers, administrative personnel) in an intense collaborative environment;
6. Persuade clients, creative directors, sponsors and colleagues to go along with a plan, and deliver the results of the plan on time;
7. Ask precise questions, convert research into design strategy, and successfully evaluate and discuss their own design efforts and the efforts of others.

Web Design Degree Outcomes

1. Write, control and troubleshoot XHTML and CSS in order to create effective and current Web pages using industry standard applications.
2. Investigate and implement current languages and utilities to assess their effectiveness in the development of Web pages and design.
3. Employ and master graphical editing and animation techniques using industry standard applications.
4. Develop Web sites and other forms of design.
5. Discover techniques and style that may act as models for their own work.
6. Collaborate in various roles typical in Web and design work.

GFC MSU – Eight Abilities:

The faculty and staff of Great Falls College MSU have deemed the following abilities to be central to the personal and professional success of all graduates:

A1 – Communication: The ability to utilize oral, written, and listening skills to effectively interact with others.

A2 – Quantitative Reasoning: The ability to understand and apply mathematical concepts and models.

A3 – Inquiry and Analysis: The ability to process and apply theoretical and ethical bases of the arts, humanities, natural and social science disciplines.

A4 – Aesthetic Engagement: The ability to develop insight into the long and rich record of human creativity through the arts to help individuals place themselves within the world in terms of culture, religion, and society.

A5 – Diversity: The ability to understand and articulate the importance and influence of diversity within and among cultures and societies.

A6 – Technical Literacy: The ability to use technology and understand its value and purpose in the workplace.

A7 – Critical Thinking: The ability to understand thinking that is responsive to and guided by intellectual standards such as relevance, accuracy, precision, clarity, depth, and breadth.

A8 – Effective Citizenship: The ability to commit to standards of personal and professional integrity, honesty, and fairness.