

PELLISSIPPI STATE COMMUNITY COLLEGE
MASTER SYLLABUS

**WEB DESIGN III: ADVANCED SITE DESIGN
WEB 2812**

Class Hours: 3.0

Credit Hours: 3.0

Laboratory Hours: 0.0

Revised: Spring 2011

NOTE: This course is not designed for transfer credit.

Catalog Course Description:

This problems-oriented course teaches the use of dynamic graphics elements to enhance Web pages and sites. Advanced concepts in page layout and site optimization are studied, with emphasis on principles used to craft dynamic Web pages that get noticed. Exercises and projects allow students to apply the principles of Web design to their own sites, which are created in the course.

Entry Level Standards:

Students taking this course should be proficient in Windows 98, 2000 or XP; have a working knowledge of the Internet; and have a working knowledge of web-page development using HTML, an HTML editor, and industry standard Web development software. Students should also be able to create, scan, and manipulate digital graphics by using a professional standard graphics program; they should be familiar with graphic and other media file types; be able to submit files online using online courseware, use SFTP software to upload files to web servers, email attachments, and be able to send files to the instructor on a backup disk or CD if needed.

Prerequisites:

WEB 1600 and MDT 2100, or CSIT 2645 or equivalent

Textbook(s) and Other Course Materials:

Required Textbook:

CSS: The Missing Manual, second edition by David Sawyer McFarland, Pogue Press O'Reilly, 2009, ISBN 978-0-596-80244-8.

Supplementary Materials:

Students will use online subscription to training videos from Lynda.com. Student should have USB/Flash Storage Media, CDs or DVDs available for saving and external back-up of work.

Software for This Course:

- HTML code editor - Notepad, TextEdit, etc.
- Photoshop CS or higher or similar professional-level photo editing program
- Dreamweaver CS4 (industry standard)
- SFTP secure file transfer protocol (download and installation instructions for Filezilla and FUGU in course)
- WinZIP
- MS Internet Explorer, Opera, Netscape, Mozilla Firefox , Safari

I. Week/Unit/Topic Basis:

Week	Topic
1	Rethinking HTML for CSS
2	Creating Styles and Style Sheets
3	Selectors: Identifying What to Style
4	Style Inheritance
5	Managing Multiple Styles: The Cascade
6	Formatting Text
7	Margins, Padding and Borders
8	Adding Graphics to Web Pages
9	Site Navigation
10	Formatting Tables and Forms
11	CSS Layout
12	Building Foat-Based Layouts
13	Positioning Elements on a Web Page
14	CSS for the Printed Page
15	Final Exam Period

II. Course Goals*:

The course will:

- A. Explore the variable factors that affect web design. I,II,II
- B. Develop web pages that focus on both the user's needs and the information requirements of content while producing a site that is easy to navigate and quick to download. I,II,II,IV,V,VI
- C. Create, scan, save, and use graphic images in web documents. I,II,II
- D. Use HTML tables to create page templates to provide control over how page content displays. I,II,II,IV,V,VI
- E. Use Cascading Style Sheets to manipulate text properties to achieve professional, effective results with quick download time. I,II,II,IV,V,VI
- F. Use color, text, and graphics judiciously to communicate and guide the reader through a site and test the sites in a variety of browsers and at different ranges of connection speeds. I,II,II,IV,V,VI
- G. Explore the advantages and disadvantages of designing web pages with frames. I,II,II,IV,V,VI

- H. Use forms to collect data. I,II,II,IV,V,VI
- I. Transfer files to the web server from the local computer and update the site as needed.
I,II,II,IV,V,VI

*Roman numerals after course objectives reference goals of the WEB program (Career Program Goals and General Education Goals are listed http://www.pstcc.edu/departments/curriculum_and_instruction/syllabi/)

III. Expected Student Learning Outcomes*:

Students will be able to:

1. Describe the current state and design limitations of HTML. A
2. Learn how XML and XHTML could transform the future of the web. A
3. Describe how web browsers affect the way users view web sites. A
4. Decide if you should use an HTML editor to create markup code. A
5. Identify the elements that make up a well-designed web page. B
6. Research the Web to locate attractive, well-designed web pages. B
7. Describe how screen resolution and connection speed affect the user's browsing experience. B
8. Clear the cache when testing your site. B
9. Describe how web pages are delivered via the Internet and stored on a user's computer. B
10. Use image maps in HTML documents. B
11. Create a site specification document. B
12. Identify a content goal. B
13. Create a user-focused site by analyzing the audience. B
14. Consider the different roles and talents necessary to build a web site. B
15. Create naming conventions for site files. B
16. Build a relative file structure that is portable to different web servers. B
17. Understand navigation principles. A,B
18. Build navigation schemes that meet users' needs. B,C
19. Use hypertext linking creatively. A,B
20. Use the Internet to do research. F
21. Use graphical for navigation and linking. A,B
22. Understand how tables can enhance the display of content. A,C

23. Use HTML table elements and attributes to customize page templates. A,C
24. Learn how to take a page design concept to HTML code. A,C
25. Recognize basic page templates. A,C
26. Understand principles for type design on a web site. A,E
27. Understand why you should use Cascading Style Sheet (CSS) instead of the element. A,E
28. Create style rules using the CSS language. A,E
29. Selectively apply CSS style rules. A,E
30. Specify CSS font properties and block-level space values. A,E
31. Build and apply style classes. A,E
32. Understand the differences between the web-based image file formats: GIF, JPG, and PNG. A,F
33. Know which type of file format to use for which type of image. A,F
34. Understand the basics of computer color. A,F
35. Use hexadecimal color values to add color to pages. A,F
36. Use the element and attributes to display images effectively. A,F
37. Understand the benefits and drawbacks of frames. A,G
38. Understand and use frames syntax. A,G
39. Understand and use frame targeting and special targeting names. A,G
40. Design framesets that accommodate different screen resolutions. A,G
41. Design forms to collect information. A,F
42. Understand the features of Internet Service Providers and what to look for when choosing one. A,I
43. Use the File Transfer Protocol (FTP) to transfer files to and from the website. A,I
44. Plan for usability testing and user feedback. A,I
45. Plan for ongoing site maintenance and updates. A,I
46. Use a variety of ways to enhance search engine listings of web site. A,I

* Capital letters after Expected Student Learning Outcomes reference the course goals listed above.

IV. Evaluation:

A. Exercises Procedures: 40% of grade

Students will complete tutorial exercises demonstrating skills for developing web pages. The tutorials will be completed in the course of reading and working through the textbook, and files will be uploaded weekly to a student directory on a web server and to an online dropbox utility.

B. Laboratory Expectations:

N/A

C. Field Work:

N/A

D. Other Evaluation Methods: 60% of grade

Projects: 55 percent of grade. Students will be assigned a website project in two broad-based phases involving the manipulation of digital graphics and formatting of web pages using CSS with HTML. Students will plan and develop a website meeting client specifications and use Photoshop, ImageReady and Dreamweaver to create assets and structure for the site.

Online Communication Tools: 5 % of grade. Students will use email and discussion in the online course to communicate with instructor and with each other.

E. Grading Scale:

A 90-100%

B 80-89 %

C 70-79 %

D 60-69 %

F 0-59 %

V. Policies:

A. Attendance Policy:

Pellissippi State expects students to attend all scheduled instructional activities. As a minimum, students in all courses (excluding distance learning courses) must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course. Individual departments/programs/disciplines, with the approval of the vice president of the Learning Division, may have requirements that are more stringent. In very specific circumstances, an appeal of the policy may be addressed to the head of the department in which the course was taken. If further action is warranted, the appeal may be addressed to the vice president of Academic Affairs.

B. Academic Dishonesty:

Academic misconduct committed either directly or indirectly by an individual or group is subject to disciplinary action. Prohibited activities include but are not limited to the following practices:

- Cheating, including but not limited to unauthorized assistance from material, people, or devices when taking a test, quiz, or examination; writing papers or reports; solving problems; or completing academic assignments.

- Plagiarism, including but not limited to paraphrasing, summarizing, or directly quoting published or unpublished work of another person, including online or computerized services, without proper documentation of the original source.
- Purchasing or otherwise obtaining prewritten essays, research papers, or materials prepared by another person or agency that sells term papers or other academic materials to be presented as one's own work.
- Taking an exam for another student.
- Providing others with information and/or answers regarding exams, quizzes, homework or other classroom assignments unless explicitly authorized by the instructor.
- Any of the above occurring within the Web or distance learning environment.

C. Accommodations for disabilities:

Students who need accommodations because of a disability, have emergency medical information to share, or need special arrangements in case the building must be evacuated should inform the instructor immediately, privately after class or in her or his office. Students must present a current accommodation plan from a staff member in Services for Students with Disabilities (SSWD) in order to receive accommodations in this course. Services for Students with Disabilities may be contacted by going to Goins 127, 132, 134, 135, 131 or by phone: 539-7153 or TTY 694-6429. More information is available at <http://www.pstcc.edu/sswd/>.

D. Other Policies:

Hardware Requirements for this Course

As below and any required for current software the student plans to use for site building.

IBM criteria:

- Intel Pentium 4, Intel Centrino, Intel Xeon, or Intel Core Duo (or compatible) processor.
- Microsoft Windows XP with Service Pack 2 or Windows Vista Home Premium, Business, Ultimate or Enterprise (certified for 32-bit editions)
- 1 GB of RAM
- 5 GB of available hard-disk space
- 1024 x 768 monitor resolution with 16-bit video card
- CD-ROM drive (DVD preferred)
- Speakers, microphone and 16 bit sound card
- High-speed Internet connection such as cable modem or DSL recommended, if possible
- Speakers

Software:

- Internet Explorer 6.0 (or higher) with Outlook Express
- Macromedia Shockwave and Flash players. Download free from <http://www.macromedia.com/downloads/>
- Adobe Acrobat Reader. Download free from <http://www.adobe.com/support/downloads/main.html>
- OPTIONAL: Netscape 7.0 (full installation)

Macintosh criteria:

- PowerPC G4 or G5 or multicore Intel processor
- Mac OS X v.10.4.8
- 1 GB of RAM
- 7 GB of available hard-disk space
- 1024 x 768 monitor resolution with 16-bit video card
- CD-ROM (DVD preferred)
- High-speed Internet connection such as cable modem or DSL recommended, if possible

- Speakers and microphone

Software:

- QuickTime 7.0.4 or better
- Adobe Reader 6 or better
- Macromedia Shockwave and Flash players. Download free from <http://www.macromedia.com/downloads/>
- Adobe Acrobat Reader. Download free from <http://www.adobe.com/support/downloads/main.html>
- OPTIONAL: Netscape 7.0 (full installation)
-

Facilities: Students must have a valid Pellissippi ID to be presented on demand to gain access to Pellissippi facilities