Syllabus: Web Accessibility and Design

EDIT 425, EDIT 526, EDSE 526

Semester: Spring 2010
Dates: January 19, 2010 – May 3, 2010
Credit hours: 3.0

Instructor

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Office hours: By appointment.

Course Description

This 3-credit course will enable students to use Adobe Dreamweaver and other Web development tools to design and develop a comprehensive web site in accordance with universal web design standards and web accessibility guidelines as defined in Section 508 of the Rehabilitation Act and the Web Content Accessibility Guidelines (WCAG) 2.0. Students will learn to evaluate and report on the accessibility of existing web content from the perspective of different disability types, using a user-centered, principle-based approach.

Focus Areas

This course has three focus areas:

1. **XHTML**
2. **CSS (Cascading Style Sheets)**
3. **Web Accessibility (Disability Access)**

Student Outcomes

The course is designed to enable students to:

1. **Create standards-based web content using XHTML 1.0 Strict and CSS (Cascading Style Sheets)**
2. **Design for disability accessibility**

Professional/Technical Standards Taught

- XHTML (1.0 strict)
- CSS
- Section 508 of the Rehabilitation Act (the portion dealing with web accessibility standards)
- WCAG (Web Content Accessibility Guidelines)

Course Web Site

The course materials are all online at courses.gmu.edu.

Readings

Web-based resources will be provided by the instructor through the course web site.

Software

Note: You do not necessarily need to buy any of the software listed below, but you will need access to it. All of the required software will be available in the classroom computer labs in Commerce I and Robinson A350. The lab in Robinson A350 usually has more public free-use time than Commerce I. Check with the lab schedules.

- **REQUIRED: A plain text editor.** I recommend PSPad or TextPad (for Windows) or Text Wrangler (for Mac).
- **REQUIRED: Dreamweaver**, since the instructor will use Dreamweaver to demonstrate the techniques. Dreamweaver is available in the computer labs in Commerce I and Robinson A350 on campus. Students may also purchase their own copy at the discounted educational rate through the campus bookstore or any other retailer such as AcademicSuperstore.com, JourneyEd.com, Gradware.com, CampusTech.com, or others. A 30-day trial version is available for download from the Adobe site, but obviously the semester lasts more than 30 days, so you'll either need to buy it eventually, use the copy in the computer labs. *(Note: I may grant permission to use another web development tool if you feel you must use another tool, but I will not provide detailed instructions for any tool other than Dreamweaver.)*
- **Optional: Any graphics program** that can create graphics for the web. We will not learn techniques for any of these programs in this class (other classes do this), but if you already know how to use them, or if you are willing to try them, they are very useful. The computer labs have Adobe Photoshop and Adobe Fireworks. For those installing the software on their own computers, if you can't afford the more expensive programs, try the cheaper ones. If you don't like any of the programs in this list, try searching on the web for "free graphics programs" (or something similar) and you'll see that you have quite a few options. (Prices shown are approximate educational price.)
    - High-end graphics software (powerful but perhaps overly complicated for people who aren't used to it):
        - *Adobe PhotoShop*—(Windows/Mac) very common among graphics professionals; can be purchased alone or in the Adobe Creative Suite); the downside is that it is expensive and can be complicated to use.
        - *Corel PhotoPaint*—(Windows) this is a powerful tool similar to PhotoShop; it comes with the CorelDraw Graphics suite; the downside is that, like PhotoShop, this has many advanced features that can be difficult to get used to.
        - *Gimp*—(Windows/Linux/Mac, in the X-windows environment) FREE. This is a powerful graphics tool at the most reasonable price of all; as with the others, the downside is that the interface is sometimes confusing to people who haven't used advanced graphics programs.
    - Mid-level software:
        - *Corel Paint Shop Pro*—(Windows/Mac) quite robust at a reasonable price; quite

user-friendly compared to some of the previously-mentioned programs.

- *Adobe Fireworks*—(Windows/Mac) great for web graphics, it comes with Adobe Creative Suite; quite user-friendly.
- *PhotoPlus*—Free. This is a great option for students on a budget. It will do most things you need to do for the web.

Assignments

Assignment	Grade %	Due	Description
Participation in class online discussions	10%	Throughout semester	The instructor will post questions and discussion items for students to respond to. Students should also take advantage of the forum to ask and answer questions to/from other students. In fact, students are highly encouraged to make this class a collaborative learning effort, with the exception of the Accessibility Test (see below).
Practice Web Page — No Template	15%	Feb. 9	The student will create a web page, according to technical specifications that the instructor provides in detail on the course web site.
Practice Web Site — Dreamweaver Template	15%	Feb. 25	This web site will have exactly the same content and design as the previous web site. The only difference is that it will be converted into a PHP template, in preparation for the final web design project.
Accessibility Test	30%	Mar. 31	The test will be available online on the course web site. The test is "open book," and "open internet" *but not "open classmate."* In other words, you may look up the answers anywhere, but not share answers with other students in the class. **Students may retake the test as many times as necessary, but you must receive an "A" on the test for it to count at all.**
Final Web Design Project	30%	April 30	The student will create a portfolio-style web site, according to the instructor's parameters, which are detailed in the course web site.

Grades

Grading Scale

Points	Grade
94–100	A
90–93	A–
87–89	B+
84–86	B
80–83	B–
70–79	C
69 or below	F

General Grading Criteria

Credit	Criteria
Full credit	The student completed the assignment as directed *AND* on time.
Partial credit	The student did not finish the assignment, turned in the assignment late, or did not follow the instructions properly.
No credit	The student did not turn in the assignment, or turned it in more than a week late.

CEHD Statement of Expectations

The College of Education and Human Development (CEHD) expects that all students abide by the following:

- Students are expected to exhibit professional behavior and dispositions. See http://cehd.gmu.edu/teacher/professional-disposition for a listing of these dispositions.
- Students must follow the guidelines of the University Honor Code. See http://academicintegrity.gmu.edu/honorcode/ for the full honor code.
- Students must agree to abide by the university policy for Responsible Use of Computing. See http://mail.gmu.edu and click on Responsible Use of Computing at the bottom of the screen.
- Students with disabilities who seek accommodations in a course must be registered with the GMU Disability Resource Center (DRC) and inform the instructor, in writing, at the beginning of the semester. See www.gmu.edu/student/drc or call 703-993-2474 to access the DRC.