WEB ACCESSIBILITY AND DESIGN

GEORGE MASON UNIVERSITY COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT INFORMATIONAL TECHNOLOGY AND SPECIAL EDUCATION

EDIT 426, EDIT 526 and EDSE 526 Web Accessibility and Design Summer B 2012 (3 credits) On-line

PROFESSOR(S):

Name: Kara Zirkle Office phone: 703-993-9815 Office location: Aquia Building Room 238 Office hours: By appointment only - I'm usually in the office Monday-Thursday from 10 am – 5 pm. I am available from Sunday at 9 pm to Friday at 7 pm for student inquiries via email or discussion board. During this five day period, I will respond to student inquiries within 24-48 hours. Email address: KZirkle1@gmu.edu

Technical Questions and Support

Name: Samit Vartak Office Phone: 703-993-3940 Email: <u>SVartak@gmu.edu</u>

COURSE DESCRIPTION:

- A. Prerequisites: None
- B. Provides instruction for accessible web design using HTML and existing authoring tools. Section 508 web accessibility standards and assistive technologies to access the computer will be explored. Develops understanding of principles of universal web design. Students apply this understanding by designing and developing accessible web site using web authoring tools.

NATURE OF COURSE DELIVERY:

All course activities for the semester will be conducted online. The course will use asynchronous format, providing students the ability to view the following material as best suits

their personal schedule within the structure of the assigned deadlines. The course is designed to create an understanding of web accessibility during the design of a website through:

- Instructor provided materials and demonstrations
- Readings, videos and research using online help
- Class, Individual and Team reviews and discussions
- Activities and assignments demonstrations and the practical application of web accessibility design, testing and reporting
- Exam
- A final project/presentation

Working online requires dedication and organization. Students must check their GMU email messages on a **daily** basis and communicate any questions or problems that might arise promptly.

PROFESSIONAL ASSOCIATION STANDARDS

- Special Education Council for Exceptional Children (CEC)
- Technology Education International Technology Education Association/ Council on Technology Teacher Education (ITEA/CTTE)
- Access Technology Higher Education Network (ATHEN)
- National Association of Accessibility Consultants (NAAC)

LEARNER OUTCOMES:

This course is designed to enable students to:

- 1. Know and test for accessibility issues on websites
- 2. Design a simple webpage to meet web accessibility standards through HTML, CSS and Dreamweaver

3. Know the basic accessibility requirements and understand how to code to them, including proper alt tags and image descriptions

- 4. Understand the concept of Universal Design
- 5. Know the basics of document accessibility by creating an accessible MS Word, MS PPT or PDF Document
- 6. Know the basics and importance of closed captioning and audio description

REQUIRED TEXTS:

1. InterACT with Web Standards: A holistic approach to web design. New Riders, Voices that Matter. 2010 Erin Anderson, Virginia DeBolt, Derek Featherstone, Lars Gunther,

Denise R. Jacobs, Leslie Jensen-Inman, Chris Mills, Christopher Schmitt, Glenda Sims, Aarron Walter: <u>http://interactwithwebstandards.com/</u> Ave Cost \$35.00

HTML Dog. New Riders Publishing. 2006 Patrick Griffiths: <u>http://htmldog.com</u> Ave Cost \$35

RECOMMENDED TEXTS:

These recommended texts will vary based upon your different learning style. I suggest you visit the library to see which ones are available or browse through Amazon to see which one may be best for you. If you would like to look through the books, I have a copy of each one at my office.

- Web Accessibility: Web Standards and Regulatory Compliance Jim Thatcher (Author), Michael R. Burks (Author), Christian Heilmann (Author), Shawn Lawton Henry (Author), Andrew Kirkpatrick(Author), Bruce Lawson (Author), Bob Regan (Author), Richard Rutter (Author), Mark Urban (Author), Cynthia D. Waddell (Author)
- 2. Accessibility for Everybody: Understanding the Section 508 Accessibility Requirements John Mueller (Author), Claudia Meyer (Foreword)
- 3. Design Accessible Web Sites: 36 Keys to Creating Content for All Audiences and Platforms (Pragmatic Programmers) Jeremy Sydik (Author)
- Maximum Accessibility: Making Your Web Site More Usable for Everyone John M. Slatin (Author), Sharron Rush (Author)

REQUIRED HARDWARE:

You will need access to a Windows or Macintosh computer with at least 2 GB of RAM and to a fast and reliable broadband internet connection (e.g., cable, DSL). A larger screen is recommended for better visibility of course material. You will need speakers or headphones to hear recorded content and a headset with a microphone is recommended for the best experience. For the amount of Hard Disk Space required to take a distance education course consider and allow for:

1. the storage amount needed to install any additional software and

2. space to store work that you will do for the course.

If you are considering the purchase of a new computer, please go to <u>http://itservices.gmu.edu/services/view-service.cfm?customel_dataPageID_4609=6233</u> to see recommendations.

REQUIRED SOFTWARE:

This course uses Blackboard as the learning management system. You will need a browser and operating system that are listed compatible or certified with the Blackboard version available on the myMason Portal. See <u>supported browsers and operating systems</u>. Log in to <u>myMason</u> to access your registered courses. Some courses may use other learning management systems. Check the syllabus or contact the instructor for details. Online courses typically use <u>Acrobat Reader,Flash</u>, Java (Windows), and <u>Windows Media</u> <u>Player</u>, <u>QuickTime</u> and/or <u>Real Media Player</u>. Your computer should be capable of running current versions of those applications. Also, make sure your computer is protected from viruses by downloading the latest version of Symantec Endpoint Protection/Anti-Virus software for free at <u>http://antivirus.gmu.edu</u>.

Students owning Macs or Linux should be aware that some courses may use software that only runs on Windows. You can set up a Mac computer with Boot Camp or virtualization software so Windows will also run on it. Watch

http://support.apple.com/kb/VI54?viewlocale=en_US about using Windows on a Mac. Computers running Linux can also be configured with virtualization software or configured to dual boot with Windows.

Note: If you are using an employer-provided computer or corporate office for class attendance, please verify with your systems administrators that you will be able to install the necessary applications and that system or corporate firewalls do not block access to any sites or media types.

COURSE-SPECIFIC HARDWARE/SOFTWARE REQUIREMENTS:

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. Please plan accordingly if you are going to use the 30 day demo.

• A plain text editor. Recommended for Windows NotePad (already installed on your computer), or <u>NotePad ++</u> (free), Recommended for Mac TextEdit (already installed on your computer), or <u>Text Wrangler</u> (free).

- **Dreamweaver** (version CS5 or higher) since the instructor will use Dreamweaver to demonstrate the techniques and you will be using Dreamweaver to create websites.
 - Dreamweaver is available in the computer labs in Robinson A350, <u>STAR Lab</u>, and <u>CLUB</u>. Arlington Campus, contact <u>Chris Tilley</u>: 703-993-7553 to loan out a laptop in Founders Hall, Rm B115. Prince William Campus, Computer Labs with Dreamweaver are: Bull Run Hall. You can also contact <u>Rick Reo</u>: 703-993-8536 for more information for Price William. Students may also purchase their own copy at the discounted educational rate through the campus bookstore or any other retailer such as: <u>AcademicSuperstore</u>, <u>JourneyEd</u>, <u>CampusTech</u> or <u>Gradware</u> to name a few. A free 30-day trial version is available for download from the <u>Adobe website</u>. *NOTE* You may need the software for more than 30 days, it is your responsibility to have access longer if needed by visiting a computer lab or purchasing the software.

Note: If you are using an employer-provided computer or corporate office for class attendance, please verify with your systems administrators that you will be able to install the necessary applications and that system or corporate firewalls do not block access to any sites or media types.

RECOMMENDED SOFTWARE:

Some students have found it helpful to purchase an educational license to <u>Lynda.com</u> Online Training Library. Other students have taken advantage of the free HTML and Dreamweaver classes provided through <u>http://ittraining.gmu.edu</u>

COURSE REQUIREMENTS, PERFORMANCE-BASED ASSESSMENT, AND EVALUATION CRITERIA:

Requirements

| | Assignment | Focus Area | Grade | Due Date | Description |
|----|---|---------------|-----------|-----------------------------------|--|
| 1. | Mock Website with 2 pages (index page and content) | HTML | 20 points | Friday, June 22 by midnight | The student will create an index and content page according to the technical specifications that the instructor provides in detail on the course website and syllabus. |
| 2. | Accessibility | Web | 10 points | Friday, July | Write a written report |
| | Evaluation of a | Accessibility | | 6 by | about the accessibility of a |

| | Mason Website | Testing | | midnight | MASON website and include the automated testing report. |
|----|---|---|--|--------------------------------------|---|
| 3. | Accessibility of Documents | Document Accessibility | 10 points | Friday July 13 by midnight | Create a document that follows the specifications that the instructor provides in detail on the course website and syllabus and use the automated software to create an accessible version. |
| 4. | Exam | Testing knowledge of HTML, CSS, Dreamweaver, Evaluation, Accessibility of Web, Document and Video | 10 points | Friday, July 20 by midnight | This test covers everything reviewed in the class. It allows for understanding and how to pull everything learned together. |
| 5. | Final Web Design Project using Dreamweaver | Dreamweaver, HTML, CSS and Accessibility | 35 points | Wednesday, July 25 by midnight | The student will create a portfolio-style website according to the instructor's parameters, which are detailed in the course website and syllabus. (See assessment Rubric on Syllabus) |
| 6. | Participation in class online discussions | All focus areas | 15 points | Throughout the 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 answers questions to/from other students. |
| 7. | Participation in group discussion | All focus areas | Not for a grade – however if all homework assignments | Throughout the Semester | Students are highly encouraged to make this class a collaborative learning effort. In doing so there are various homework assignments to |

| | | | are completed and participation is regular it can be worth up to 5 extra credit points. | | be posted, reviewed and commented on for peer review throughout the class. The instructor will be monitoring this group peer review throughout the semester. |
|----|-------------|------------------|--|-------------|--|
| 8. | Bookshare – | Accessibility of | Up to 5 | On students | Students have the |
| | Image | images – Alt | extra credit | own time | opportunity to complete |
| | Description | tags | points | throughout | an extra credit assignment. |
| | | | | the | This assignment includes |
| | | | | semester | working with BookShare |
| | | | | (not | and their partners to |
| | | | | required) | include accessible image |
| | | | | | descriptions of books used |
| | | | | | by Bookshare. More |
| | | | | | information is provided on |
| | | | | | Blackboard. |

A. Performance-based assessments

This course includes 5 performance-based assessments:

- 1. Practice creating a Mock Website with 2 pages (homepage and content)
- 2. Practice Accessibility Evaluation of a Mason Website
- 3. Practice Accessibility of Documents and proper description of images
- 4. Test of knowledge throughout semester
- 5. Final Web Design Project using Dreamweaver

These are described above in Requirements

B. Criteria for evaluation

Detailed criteria for evaluation will be given to students for each assignment. **ASSESSMENT RUBRIC(S)**

Final Project Assignment rubric

| | No Evidence | Beginning (Limited | Developing (Clear evidence) | Accomplished (Clear, convincing, | SCORE |
|--|----------------|------------------------------|---------------------------------------|-------------------------------------|-------|
| | 1 | evidence) 2 | 3 | substantial evidence) 4 | |
| CRITERIA (35 points) | | | | | |
| Layout and Navigation | | | | | |
| Site including a skip navigation link where appropriate | | | | | |
| Is site clear and simple to navigate? | | | | | |
| Design | | | | | |
| Each page indicates Page Title, and Contact Information (Date last Updated is helpful) Site includes at least one accessible complex table to display data? Site includes meaningful links and alt tags? Site includes one image that requires a long description? Site includes one captioned audio or video file? Site provides good color contrast? Site includes proper coding for an accessible | | | | | |
| form | | | | | |
| Error Free | | | | | |
| No broken imagesNo broken links | | | | | |
| PresentationDid the student present | | | | | |

| the rationale, accessibility features and design features of the project in a clear and | | | |
|--|--|--|--|
| organized way? | | | |
| Did the student present | | | |
| the final website? | | | |

C. Grading Scale –

| Points | Grade |
|-------------|-------|
| 94-100 | Α |
| 90-93 | A- |
| 86-89 | B+ |
| 80-85 | В |
| 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 late. Late assignments will not be accepted, if unforeseen circumstances occur please contact me on an individual basis.

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT

Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See http://academicintegrity.gmu.edu/honorcode/].
- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See http://ods.gmu.edu/].

- Students must follow the university policy for Responsible Use of Computing [See <u>http://universitypolicy.gmu.edu/1301gen.html</u>].
- Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- Students are expected to exhibit professional behaviors and dispositions at all times.

Campus Resources

- The George Mason Office of Disability Services Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor in writing at the beginning of the semester <u>http://ods.gmu.edu/</u>].
- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <u>http://caps.gmu.edu/</u>].
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <u>http://writingcenter.gmu.edu/</u>].

Core Values Commitment:

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. <u>http://cehd.gmu.edu/academics/</u>

PROPOSED CLASS SCHEDULE

Important items to keep in mind and things to do to help prepare yourself before the first day of class:

- Get acquainted with new 9.1 Blackboard course structure: Blackboard If you need help with Blackboard please visit the HELP tab on MyMason Portal or visit this link: <u>http://ondemand.blackboard.com/students.htm</u>
- 2. Review Syllabus (please email me if you have questions)
 - Most documents that are assigned for reading are also located on BB under Syllabus and Documents - Supplemental Material in case you have problems opening the links.
- 3. Familiarize yourself with Peer Review Discussion Board I will be reviewing the Peer Review Discussion Board throughout the semester. It will not be for a grade, but if completed and equally contributed on, will be a great benefit. It will also provide a better learning environment throughout the semester because each week builds on the next.
- 4. **Discussion Questions (Due by Friday at midnight)** Weekly Discussion Questions (2 points each week, with the last week worth 3 points totaling 15 points all together)
 - Each discussion question will be posted by Monday, beginning of the week and must be commented on by midnight Friday of that same week for credit.
- Reviewing your Site setup (Cyberduck or Dropbox) For your final project, you will be creating your own website. For EDIT students, consider this as a great starting point for a <u>portfolio</u>. You can use Cyberduck to create your <u>Mason Website</u> or use Dropbox. For more information on Cyberduck or Dropbox, please visit Syllabus and Documents under Supplemental Course Materials.
- 6. EXTRA CREDIT OPTION: Bookshare Image Description worth up to 5 points. Please visit Syllabus and Documents then Supplemental Course Materials for more information about this opportunity.

| Date | Topic/Learning Experiences | Readings and Assignments |
|----------|---|---|
| Week 1 | 1. Introduction: Overview of | First, create your Introduction Blog – Go to Tools, Blog and |
| June 4 – | Web Accessibility and | Introduce yourself to the class. |
| June 8 | What the Law Says about | |
| | Web Accessibility, Section | <u>Required Read</u> Interact with Web Standards: Chapter 22: |
| | 508. | Accessibility Intro pages 405-412 |
| | | |
| | 2. The User's Perspective: | <u>Required:</u> It is important to understand the differences between |
| | How do people with disabilities access the web? | WCAG and Section 508. We'll be focusing on Section 508, which was originally taken from parts of the WCAG. This site breaks |
| | Overview of technologies | this down: http://www.jimthatcher.com/sidebyside.htm |
| | used by individuals with | |
| | disabilities and how they | Recommended: Introduction to Web Accessibility: |
| | can help with testing. | http://www.w3.org/WAI/intro/accessibility.php |
| | Identifying barriers | |
| | associated with these disa- | <u>Required:</u> The Law and Web Accessibility: Section 508: Choose |
| | bilities. | between these two documents (read one) |
| | | |
| | 3. Building Accessible | Web Accessibility and the Law: http://www.www.ticeles.com/orticles/1167.Web |
| | Websites (Section 508: 1194.22 Web-based | <u>http://www.practicalecommerce.com/articles/1167-Web-</u> Accessibility-and-the-Law |
| | Intranet and Internet | Accessionity-and-the-Law |
| | Information and | • Policies Related to Web Accessibility in the United States: |
| | Applications) – Learning | http://www.w3.org/WAI/Policy/#US |
| | how Accessibility Helps | |
| | | Required: User Perspective: |
| | 4. Group Peer Reviews | Choose one of these three videos to watch. |
| | (responses due by Friday, | |
| | June 8 @ midnight) | World Wide Access: Accessible Web Design: http://www.weakington.org/ul/id/accessible/accesbible/accessible/accessible/accessible/accessible/accessible/acces |
| | 5. Discussion Board (response | http://www.washington.edu/doit/Video/index.php?vid=35 |
| | due by Friday, June 8 @ | Keeping Web Accessibility in Mind: |
| | midnight) | http://webaim.org/intro/video |
| | | |
| | | Accessibility: Screen Readers and the Web: |
| | | http://www.doit.wisc.edu/accessibility/video/screen_read |
| | | ers.asp |
| | | |
| | | Often websites are tested with both 1194.21 (Software |
| | | Applications and Operating Systems) and .22 (Web-based Internet and Intranet Information and Systems) due to the |
| | | advancement of technology and design of websites. |
| | | |
| L | | 1 |

| | | | Required Read Interact with Web Standards: Chapter 23 pages413-425. There are various "Try it Yourself" options that willhelp you have a better understanding of how someone with adisability may have difficulty accessing the computer andinaccessible websites.Go to the Discussion Board where you'll see "Try It Yourself"Peer Review. Post your findings from the "Try It Yourself"that you chose from this chapter and discuss among oneanother what has been learned. *Note* All "Try It Yourself"is in the Interact with Web Standards book. |
|-----------------------------------|----|---|---|
| | | | <u>Required</u> : Review one of the following documents to better understand these standards and how they will help you build a more accessible website: |
| | | | <u>http://webaccessibility.gmu.edu/docs/access-board-gov_sec508_guide_1194-22pdf</u> |
| | | | <u>http://webaccessibility.gmu.edu/docs/Appendix%20C%20-</u> %20Section%20508%20tips%20for%20Web.pdf |
| | | | <u>Required:</u> A Voluntary Product Accessibility Template is something that is requested when electronic and information technology is being purchased or created. Not all sections would need to be completed; it is dependent upon what is being procured. For this purpose though please review the first two standards .21 and .22 and see why they are both being used to test today's websites and applications. |
| | | | http://webaccessibility.gmu.edu/docs/Appendix%20E%20- %20static%20vpat%20version.pdf |
| Week 2 June 11 – June 15 | 1. | Learning basic HTML by using a text editor to incorporate the accessible features into a | Required Readings: Interact with Web Standards: Chapter 10 HTML Intro: Read pages 154-170 and watch: <u>http://www.youtube.com/watch?v=r52v5oaptPo&cc=1</u> |
| | 2. | website. Discussion Board (responses due by Friday, June 15 @ midnight) | Complete "Try it Yourself", on page 158. Use the "Try it Yourself" to help create your first webpage – post in your Peer Review and comment. <u>Required Readings:</u> HTML Dog: Chapter 1: Getting Started: Read |
| | 3. | Peer Review Discussion | pages 1 - 36 |

| | | Board (responses due by | Required Read Interact with Web Standards: Chapter 11: CSS |
|---------|------------|--|---|
| | | Friday, June 15 @ | Intro. Pages 171 – 196 |
| | | midnight) | |
| | 4. | Learning basic CSS to incorporate the accessible features into a website. | Remember sometimes adding more code on individual pages can cause more work in terms of accessibility. Building it into the CSS using an application like NotePad can cut down time. You need to have an overview idea of the goal in which you are trying to meet when developing websites to know what tools will work best for you to design effectively and efficiently. |
| | | | Practice with the Try it Yourself items on page 178 and 180. |
| | | | <u>Required:</u> Complete Try it Yourself on page 188 and submit by June 15. Submit to your Group for Peer Review. |
| | | | Required Reading: Building Accessibility into CSS: http://dev.opera.com/articles/view/building-accessible-static- navigation-wi/ |
| | | | Recommended Videos can be found under Supplemental Course Material |
| | | | Recommended: HTML Dog: Appendix A and B for help with XHTML and CSS Reference |
| Week 3 | 1. (| Continued - Learning basic | Required Read: HTML Dog: Chapter 2: Text pages 37 - 60 |
| June 18 | ŀ | ITML and CSS by using a | |
| – June | | ext editor to incorporate | Complete the Interact with Web Standards: "Try it Yourself" on |
| 22 | - | he accessible features into | page 201 and share feedback with your Peer Review Group. |
| | a | a website. | Recommended Read: Interact with Web Standards: Chapter 13: |
| | 2. Г | Discussion Board | Headings and Paragraphs pages 212-232 |
| | (| responses due by Friday, une 22 @ midnight) | Required Read: HTML Dog: Chapter 3: Links pages 61 - 74 |
| | з і | earning more about how | Required Read: HTML Dog: Chapter 4: Images pages 75 - 92 |
| | t | o build websites – Images and Lists | Required Read: HTML Dog: Chapter 8: Tables pages 155 - 170 |
| | | earning how to create online forms | Pick 2 "Try it Yourself" practices from Interact with Web Standards from any of these 3 chapters: Chapter 15: Links, Chapter 16: Images or Chapter 18: Tables and post to your Peer Review Discussion Board and comment. |
| | 5. A | Assignment 1 (responses | |

| | lue by Friday, June 22 @ nidnight) | If you need more practice you may find it beneficial to try some of the Interact with Web Standards"Try it Yourself" practices and share with the class in the Peer Review Discussion Board. |
|-----------|---|---|
| a | In order for you ssignments to be accepted you must:* | Assignment 1 (20 points): |
| | . Your website must be | Recommended Reading: Interact with Web Standards: Chapter 25: Pages 449 - 479 |
| | posted to your Mason Personal Page or Dropbox to be accepted. | Create a mock website with ideas for your final. This mock website must include 2 webpages. For example, this would be your home page (index.html) and a content page (i.e. About me, Contact us, Resources, etc.). |
| 2 | Also, to submit assignments please go | I will be looking for the following for this assignment: |
| | to the Discussion Board and post to the appropriate Assignment Name. | A visual design for your site that you must create on your own. For ideas on visual designs, you may find examples at this URL: <u>http://eagle.gmu.edu/mason_template/</u>. *NOTE* All work must be completed in HTML and/or CSS code. I will not accept any work designed using a template generator or Dreamweaver. |
| | | 2) Identify the following components on each webpage |
| | | a. Page Title b. Navigation Links - There should be a minimum of 2 working links allowing you to move between the two pages (ex: Home and About me, Contact us, Resources, etc.) c. Content on each page (this does not have to be lengthy) d. Accessible Image (one for each page) e. Table (this can be used for presentation or data) f. Contact Information (this should have linked information to email) |
| | | **Note – you will not be graded for the accessibility of your site, only the image on each page. Accessibility of your site will be graded on your final project.** |
| | | Submit your assignment by midnight, Friday June 22 |
| June 25 D | earning/Using Dreamweaver to create an accessible website using a | <u>Required:</u> Watch Create a Website in Dreamweaver CS4 (Template Tutorial): |

| 29 | template. | http://www.youtube.com/watch?v=suMK2pcygoc |
|------------------------------|--|---|
| | 2. Learning/Using Dreamweaver to create an accessible website using | • Template based pages Creating a First Web Site with Dreamweaver: <u>http://www.youtube.com/watch?v=Z2fvx0j1n_k</u> |
| | HTML. 3. Discussion Board (Responses due by Friday, June 29 @ midnight) | Now that you've worked with HTML and CSS coding and used Dreamweaver Templates- you're ready to create your own website using dreamweaver. |
| | Suite 19 (e miningite) | Required: Visit the link for setup and review the zip file ifneeded:http://www.adobe.com/devnet/dreamweaver/articles/first_website_pt1.html |
| | | Required Video: |
| | | Adobe Dreamweaver Introduction Tutorial-How to Make a Website in HTML: |
| | | http://www.youtube.com/watch?v=fwAloDgH4mw |
| | | <u>Required:</u> Practice creating a website using Dreamweaver and create a rough draft index page (you can later use this page for your final project) and share with your Peer Review Group for discussion. This should be posted on your personal Mason website. |
| | | Recommended tutorial videos available on Supplemental Course Material. |
| Week 5 July 2 – July 6 | How to evaluate or test websites for Section 508 Compliance. Assignment 2 (10 Points) - Due Friday @ | |
| | midnight July 6 | website validation tools mentioned below, evaluate the accessibility of a Mason website that is inaccessible. Prepare a 1- |
| | 2. Discussion Board (Responses due by Friday, July 6 @ midnight) | 2 page summary of the issues found on the site with suggestions on how to correct them. For full credit, you <u>MUST</u> include the validation reports provided by the tools you choose to use. Submit your assignment on the appropriate Discussion Board |
| | 3. Universal Design: Understanding how accessibility is useful for everyone. | area. <u>Required Read:</u> Interact with Web Standards: Chapter 24: Accessibility Testing pages 426 – 448 |

| 4. | Great Resources for Universal Design: | How to Test Websites for Compliance |
|----|--|---|
| | http://www.udlcenter.org/ implementation/examples | There are two ways to test websites: Manual and Automated. Automated is what you'll be doing for the assignment. Manual is using assistive technology such as a screen reader and Automated uses a testing tool software. We'll review both ways of testing so that you can test your website to ensure compliance. |
| | | Manually testing websites: |
| | | Most testers use a screen reading software. In this case, we'll discuss using JAWS from Freedom Scientific. This allows you to hear how the website will be read, shown in week one examples. There are some quick and easy keystrokes while running JAWS that will allow you to test various areas of your site. If you want to learn more about how to use JAWS for manual testing, please ask me questions and/or visit this site for keystroke quick references: http://www.wats.ca/show.php?contentid=48 Manual testing is not taught in this class due to shortage on time. It is good to know the difference between the two types of testing. |
| | | Automated testing websites: |
| | | Review Free to Low Cost Validators for some of the most commonly used applications used for automated testing: <u>http://webaccessibility.gmu.edu/validators.html</u> |
| | | When learning how to test accessible websites, most people like either the WAVE or FAE application. WAVE has a red, yellow green feature similar to a stop light. FAE gives example documents and "how to" directions for errors. Most developers prefer the look and feel of the Deque WorldSpace or FireEyes because it gives more detailed information. Also, Deque is one of the few that allows you to test only Section 508 Compliance, while WAVE and FAE both follow WCAG. It is important to know which standard(s) you are testing to in order to know what changes will need to be made to the website. |
| | | In both cases (automated or manual), you must review the website that you are testing for areas that the screen reader and/or automated testing tool may not catch. Please visit the Supplemental Documents find additional documents that help for |

| | | checking web accessibility visually. |
|----------|---|---|
| | | At the beginning of the semester you read about accessibility, how it affects various disabilities and learned the differences about the many laws that help advocate for accessibility. This week we are focusing on Universal Design. Remember back to those first few weeks while you read the documents below. Think about how using a "Universal Design" method can help a majority of individuals, regardless of whether or not they have a disability. |
| | | Required Reads: Pick 2 of the 3 documents to read: |
| | | Universal Design of Instruction (UDI) Article: <u>http://www.washington.edu/doit/Brochures/Academics/instruction.html</u> Using Universal Design to Unlock the Potential for Academic Achievement of At-Risk Learners<u>http://craigcunningham.com/nlu/tie536fall09/Using%20UDL%20to%20unlock%20potential.pdf</u> Fast Facts for Universal Design for Learning: Elements of Good Teaching: <u>http://ada.osu.edu/resources/fastfacts/Universal-</u> |
| | | Design-FF.pdf |
| Week 6 | 1. Understanding Accessible | Accessible Multimedia: Required Read: |
| July 9 – | Multimedia. | http://webaccess.msu.edu/tutorials/accessible-videos.html |
| July 13 | Discussion Board (Due by Friday, July 13 @ midnight) Learning how to create an | <u>Required Watch</u> : YouTube has an automatic captioning program that attempts to "caption" videos using voice recognition. This is not the same as having someone caption the video manually. Please see the following as an accurate and proper captioned |
| | accessible document and proper image description to add to your website. (Choose one: PDF, PPT or Word) | <pre>video and audio described example (notice the caption is timed properly, words are spelled correctly, sounds are defined, etc.): <u>http://www.youtube.com/watch?v=YQUAs3syuJE</u> Bad example: <u>http://www.youtube.com/watch?v=NDfew0YcDTo</u> (At first glance you may think this works pretty good, if you watch though</pre> |
| | 4. For download instructions and recommended documents please visit the Assignment 3 Discussion Board | the inconsistencies may be small in number but huge in difference.) For anyone interested in learning more after our class: <u>http://www.adainfo.org/content/Webinar-How-to-Create-</u> <u>Accessible-Video</u> |
| | 5. Assignment 3 (10 Points) – Due @ Midnight Friday July 13. | Assignment 3 (10 points): Create an inaccessible Microsoft Word or PPT document that has the following (this can be something very short and simple or as complex as you want): |

| | | 1 |
|---------------------|---|--|
| | | An image |
| | | A table (for presentation) |
| | | A data table |
| | | Header |
| | | Content |
| | | |
| | | Once your document is created, run one of the accessibility software options mentioned below to create an accessible version of your document and submit both documents by Friday at midnight. |
| | | Select your desired Software Option and read the corresponding URL. |
| Week 7 July 16 – | Bringing it All Together Discussion Board (Due | Net-Centric PAW (Office 2010) – available for a 30 day download or at cost. <u>Required Read:</u> <u>http://www.commonlook.com/commonlook-office-overview</u> Virtual 508 – Illinois Accessible Wizard (Office 2007) - available for a 30 day download or at cost. <u>Required Read:</u> <u>http://virtual508.com/man-convert.html</u> Built-In Accessibility Checker in Microsoft Office - Free <u>Required Read: http://office2010.microsoft.com/en-us/starter-help/accessibility-checker- HA010369192.aspx?CTT=5&origin=HA010369190</u> Understanding how to pull everything learned from the semester together to create a working, accessible website. |
| July 20 | • | |
| | by Friday, July 20 @ | Required Read: HTML Dog: Chapter 5: Layout pages 93 – 134 AND |
| | midnight) | Interact with Web Standards: Chapter 25: Bringing It Together |
| | | pages 450 – 479 |
| | 3. Exam – Due by Friday, July 20 @ midnight | Take Exam (10 points) – Closes Friday, July 20 at midnight. |
| | Work on Final Project - Final Project is due by midnight Wednesday, July 25 | Final Project: Accessible Website Development (35 points) Due July 25 |
| | July 23 | Please post the link to your final project on the Discussion Board marked "Final Assignment". There you should also answer the 2 questions below explaining your goal. Finally, please make a note in the Discussion Board of which pages have the required elements below (example: image is on index page). |

| Week 8 FINALS July 23 – | Final Projects Due Work on Final Project - Final Project is due by midnight Wednesday. July 25 | Develop an accessible website. This site can be on a topic of your choice and should include at least 4 pages centered on an identified theme. The project must include the following elements (not required per page): Skip Navigation (all pages) At least one image (alt tagged) At least one complex image (one that would require a D-link, such as a table, graph, etc.) A captioned video or audio file (it can be pulled from YouTube, etc. and embedded into your site but please try to find a video that is not using Google YouTube automatic captioning. If you must use one of these videos please make a disclaimer that the video is using Google automatic captioning and may not be accurate where the video is posted.) Accessible Word, PowerPoint or PDF File (example: resume, homework assignment, etc) A working form (Ex: this can be used as part of your "contact us") Explain the goal of your site and justify the design features: What fonts and colors did you use and why? (Did you check your page for color blindness issues?) Why did you choose the layout that you did, is the reading order accessible? Final Project: Accessible Website Development (35 points) Due July 25 |
|---|---|--|
| FINALS | Work on Final Project - Final | points) Due July 25 |
| July 23 – July 25 (Wedne sday) | Wednesday, July 25 | marked "Final Assignment". There you should also answer the 2 questions below explaining your goal. Finally, please make a note in the Discussion Board of which pages have the required elements below (example: image is on index page). |
| | | Develop an accessible website. This site can be on a topic of your choice and should include at least 4 pages centered on an identified theme. The project must include the following elements (not required per page): |
| | | Skip Navigation (all pages)At least one image (alt tagged) |

| At least one complex image (one that would require a D-link, such as a table, graph, etc.) A captioned video or audio file (it can be pulled from YouTube, etc. and embedded into your site but please try to find a video that is not using Google YouTube automatic captioning. If you must use one of these videos please make a disclaimer that the video is using Google automatic captioning and may not be accurate where the video is posted.) Accessible Word, PowerPoint or PDF File (example: resume, homework assignment, etc) A working form (Ex: this can be used as part of your "contact us") |
|--|
| Explain the goal of your site and justify the design features: 1. What fonts and colors did you use and why? (Did you check your page for color blindness issues?) 2. Why did you choose the layout that you did, is the reading order accessible? |

Comments: