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 Fall Semester 2012 (3 credits) On-line

PROFESSOR(S):

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Technical Questions and Support

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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: http://interactwithwebstandards.com/ Ave Cost \$35.00

HTML Dog. New Riders Publishing. 2006 Patrick Griffiths: http://htmldog.com 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. Online courses typically use <u>Acrobat</u> <u>Reader,Flash</u>, Java (Windows), <u>Microsoft Office</u>, 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 we 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>

Also, if you are using a Mac and you find yourself needing to you a PC for some of the assignment (specifically the document accessibility assignment), you have access to the <u>Virtual Computing Lab</u> (<u>VCL</u>). You will have access to Microsoft Office 2010 as well as a few other software applications (the list is growing).

Finally, **Read and Write Gold by TextHelp** is software we suggest as a Universally Designed technology. It helps various learning styles as well as individuals with disabilities, English as a second language, etc. Mason is offering this free to all students, please visit ATI for a copy of the software. The link above will show you the various tools it offers including electronic text to MP3, help with Bibliography writing summary features and highlighting/extracting of documents. For more information please contact the ATI office: <u>http://ati.gmu.edu</u>

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

A. Requirements

	Assignment	Focus Area	Grade	Due Date	Description
1.	Mock Website with 2 pages (index page and content)	HTML	10 points	Friday October 12 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 Evaluation of a Mason Website	Web Accessibility Testing	10 points	Friday, Nov 2 by midnight	Write a written report about the accessibility of a MASON website and include the automated testing report.
3.	Accessibility of Documents	Document Accessibility	10 points	Friday, Nov 9 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, Dec 7 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	Friday, Dec 14 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 (1 point per week)	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 peer review group discussion	All focus areas	10 points	Throughout the Semester	Students are highly encouraged to make this class a collaborative learning effort. In doing so there are various homework assignments to 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 – Image Description	Accessibility of images – Alt tags	Up to 5 extra credit points	On students own time throughout the semester (not required)	Students have the opportunity to complete an extra credit assignment. This assignment includes working with BookShare and their partners to include accessible image descriptions of books used by Bookshare. More information is provided on Blackboard.

B. 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

C. Criteria for evaluation

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

(1) Protocols for posting threads and contributing to the online discussion board questions are as follows:

Postings should be evenly distributed during the discussion period (not concentrated all on one day or at the beginning and/or end of the period).

Postings should be a minimum of 50 words.

Avoid postings that are limited to 'I agree' or 'great idea', etc. If you agree (or disagree) with a posting then say why you agree by supporting your statement with concepts from the readings or by bringing in a related example or experience.

Address the questions as much as possible (don't let the discussion stray).

Try to use quotes from the articles that support your postings. Include page numbers when you do that.

Build on others responses to create threads.

Bring in related prior knowledge (work experience, prior coursework, readings, etc.)

Use proper etiquette (proper language, typing, etc.).

(2) Grading Rubric for evaluating online the discussion board questions:

Discussion Rubric						
Criteria	Expected	Sufficient	Insufficient	Not Evident or Not Completed		
Timely discussion contributions	2 postings well distributed throughout the discussion period	2 postings distributed throughout the discussion period	1 posting somewhat distributed throughout the discussion period	0-2 postings not distributed throughout the discussion period		

Responsiveness to discussion and demonstration of knowledge and understanding gained from assigned reading	very clear that readings were understood and incorporated well into responses	readings were understood and incorporated into responses	postings have questionable relationship to reading material	not evident that readings were understood and/or not incorporated into the discussion
Adherence to online protocols (see above)	all online protocols adhered to	1 online protocol not adhered to	2-3 online protocols not adhered to	4 or more online protocols not adhered to
Points	15	12-14	8-11	7 or less

(3) Grading Rubric for Peer Review Homework:

		Discussion Rubric		
Criteria	Expected	Sufficient	Insufficient	Not Evident or Not Completed
Timely posting and collaboration with students	All homework assignment completed as well as student homework elaborately commented on (helpful hints, best practices, etc.)	All homework assignment completed as well as student homework reviewed and commented on.	¾ of homework assignment completed and no collaboration between student postings or only partial homework assignment postings	Less than half of homework assignments completed and no collaboration between postings
Responsiveness to discussion and demonstration of knowledge and understanding gained from assigned reading	very clear that homework was understood and incorporated well into student collaboration	homework was completed and incorporated into student collaboration	homework is incomplete or show having questionable relationship the "Try it Yourself" an none to minimal student collaboration	not evident that homework was understood or completed and/or no student collaboration
Points	10	9-7	6-4	3 or less

(4) Grading Rubric for Final Project:

	No Evidence 1	Beginning (Limited evidence) 2	Developing (Clear evidence) 3	Accomplished (Clear, convincing, substantial evidence) 4	SCORE
CRITERIA (35 points)					
Layout and Navigation					
Skip navigation link on					
all pages					
 Is site clear and simple 					
to navigate?					
Design					
 Each page indicates 					
Header, Page Title, and					
Contact Information					
(Date last Updated is					
helpful)					
• Site includes at least one					
accessible table with					
headers.					
Site includes at least one					
accessible complex					
image that needs a descriptive link?					
Site includes meaningful					
links and alt tags?					
Site includes one					
captioned video file?					
Site provides good color					
contrast?					
Site includes proper					
coding for an accessible					
form.					
• Site includes at least one					
accessible document.					
Error Free					
No broken images					
No broken links					
• Fully Accessible					
Presentation					
• Did the student present					
the rationale,					

		ſ	
accessibility features			
and design features of			
the project in a clear and			
organized way?			
• Did the student present			
the final website? (ie.			
List where items are			
located)			

D. Grading Scale –

Points	Grade
94-100	Α
90-93	A-
86-89	B+
80-85	В
70-79	С
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 <u>http://academicintegrity.gmu.edu/honorcode/</u>].
- 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 carefully. You'll find most answers to your questions here if you go back and review the 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 is worth 10 points, 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. Please see the rubric for grading information.
- 4. **Discussion Questions (Due by Friday at midnight)** Weekly Discussion Questions (1 point per week, totaling 15 points all together)
 - Each discussion question will be posted on Friday the week before it's due 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 Discussion Board – Go to
Aug 27 -	Web Accessibility and	Discussions - Introduction of Course and Students and Introduce
31	What the Law Says about	yourself to the class.
	Web Accessibility, Section	
	508.	Required Read Interact with Web Standards: Chapter 22:

		Accessibility Intro pages 405-412
	2. The User's Perspective:	
	How do people with	<u>Required</u> : It is important to understand the differences between
	disabilities access the web?	WCAG and Section 508. We'll be focusing on Section 508, which
	Overview of technologies	was originally taken from parts of the WCAG. This site breaks
	used by individuals with	this down: http://www.jimthatcher.com/sidebyside.htm
	disabilities and how they	
	can help with testing.	Recommended: Introduction to Web Accessibility:
	Identifying barriers	http://www.w3.org/WAI/intro/accessibility.php
	associated with these disa-	
	bilities.	<u>Required:</u> The Law and Web Accessibility: Section 508: Choose
		between these two documents (read one)
	3. Discussion Board Week 1	
	Post and Introduction	Web Accessibility and the Law:
	(response due by Friday, @	http://www.practicalecommerce.com/articles/1167-Web-
	midnight)	Accessibility-and-the-Law
	4. There are additional	• Policies Related to Web Accessibility in the United States:
	recommended readings	http://www.w3.org/WAI/Policy/#US
	and/or videos on the	
	Syllabus and Documents	Required: User Perspective:
	section under	Choose one of these three videos to watch.
	"Supplemental Course	
	Material" that you may	World Wide Access: Accessible Web Design:
	find helpful throughout the	http://www.washington.edu/doit/Video/index.php?vid=35
	semester.	. Kooning Mash Accordibility in Adia d
		Keeping Web Accessibility in Mind: http://websime.org/intro./widee
		http://webaim.org/intro/video
		Accessibility: Screen Readers and the Web:
		Accessibility: Screen Readers and the web: <u>http://www.doit.wisc.edu/accessibility/video/screen_read</u>
		ers.asp
Week 2	1. Building Accessible	Often websites are tested with both 1194.21 (Software
Sept 3-7	Websites (Section 508:	Applications and Operating Systems) and .22 (Web-based
	1194.22 Web-based	Internet and Intranet Information and Systems) due to the
	Intranet and Internet	advancement of technology and design of websites.
	Information and	
	Applications) –	Required Read Interact with Web Standards: Chapter 23 pages
	Learning how	413-425. There are various "Try it Yourself" options that will
	Accessibility Helps	help you have a better understanding of how someone with a
		disability may have difficulty accessing the computer and
	2. Group Peer Reviews	inaccessible websites.
	(responses due by	
L		l

	 Friday @ midnight) 3. Discussion Board (response due by Friday @ midnight) 4. There are additional recommended readings 	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 one another 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:
	and/or videos on the Syllabus and Documents section under "Supplemental Course Material" that you may find helpful throughout the	 <u>http://webaccessibility.gmu.edu/docs/access-board-gov_sec508_guide_1194-22pdf</u> <u>http://webaccessibility.gmu.edu/docs/Appendix%20C%20-%20Section%20508%20tips%20for%20Web.pdf</u>
	semester.	Required: 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. <u>http://webaccessibility.gmu.edu/docs/Appendix%20E%20-</u> %20static%20vpat%20version.pdf
Week 3 Sept 10 - 14	 Learning basic HTML by using a text editor to incorporate the accessible features into a website. Discussion Board (responses due by Friday 	Required Readings: Interact with Web Standards: Chapter 10 HTML Intro: Read pages 154-170 and watch: http://www.youtube.com/watch?v=r52v5oaptPo&cc=1 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.
	 @ midnight) 3. Peer Review Discussion Board (responses due by Friday @ midnight) 	<u>Required Readings:</u> HTML Dog: Chapter 1: Getting Started : Read pages 1 - 36 Recommended: HTML Dog: Appendix A
	 There are additional recommended readings and/or videos on the 	

	Syllabus and Documents section under "Supplemental Course Material" that you may find helpful throughout the semester.	
Week 4 Sept 17 - 21	 Learning basic CSS to incorporate the accessible features into a website. Peer Review Discussion Board (responses due by Friday @ midnight) 	Required Read Interact with Web Standards: Chapter 11: CSSIntro. Pages 171 – 196Remember 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 and then applying it to all of the pages 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
	 Discussion Question (responses due by Friday @ midnight) 	 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 5 Sept 24 - 28	 Continued - Learning basic HTML and CSS by using a text editor to incorporate the accessible features into a website. 	Required Read: HTML Dog: Chapter 2: Text pages 37 - 60 Required Read: Interact with Web Standards: Chapter 13: Headings and Paragraphs pages 212-232 Required Read: HTML Dog: Chapter 5: Layout pages 93 – 134
	 Learning more about how to build websites – Headings, Paragraphs and Layout 	Complete one of the following Interact with Web Standards: "Try it Yourself" on page 201 or page 218 share feedback with your Peer Review Group.

Week 6 Oct 1 – 5	 Peer Review Discussion Board (responses due by Friday @ midnight) Discussion Board (responses due by Friday @ midnight) Learning more about how to build websites – Links , Images and Tables Peer Review Discussion Board (responses due by Friday @ midnight) Discussion Question (Due by Friday @ midnight) 	Required Read: HTML Dog: Chapter 3: Links pages 61 - 74 Required Read: HTML Dog: Chapter 4: Images pages 75 - 92 Required Read: HTML Dog: Chapter 4: Images pages 155 - 170 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. 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. You can also request Collaborate meetings or Face-to-Face
Week 7 Oct 8 - 12	1. Assignment 1 (responses due by Friday, Oct 12 @ midnight)	meetings with Samit. <u>Assignment 1 (10 points):</u> Required Reading: Interact with Web Standards Chapter 25: Degree 440 - 470
	*In order for your assignments to be accepted complete the following:	Pages 449 - 479 Create a mock website with ideas for your final project. This mock website must include 2 completed and working webpages. For example, this would be your home page (index.html) and a content page (i.e. About me, Contact us, Resources, etc.).
	1. Your website must be posted to your Mason Personal Page or Dropbox to be accepted. This means you would be posting a web address/link to your site not zip files or a link from your hard drive. Please see	 I will be looking for the following for this assignment: 1) A visual design (you can use CSS or HTML but it must have a clear format) for your site that you must create on your own. To get an "overall general idea" of different visual designs, you may find examples at this URL: http://eagle.gmu.edu/mason template/. *NOTE* This link is ONLY for you to get ideas of different visual designs,

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		Supplemental		you are not to use the templates. <u>All work must be</u>
		documents for more		completed in HTML and CSS code. I will not accept any
		information on		work designed using a template generator or
		Dropbox or Cyberduck.		<u>Dreamweaver.</u>
	2.	Also, to submit assignments please go to the Discussion Board	2)	Identify the following components on <u>each</u> <u>webpage</u> (worth 1 point for each component per page)
		and post to the		
		appropriate		Page Title
		Assignment Name.	b.	Headers for pages
		Assignment Name.	-	If you are wondering the difference between the Title and Header think of it as:
	3.	Discussion Board (responses due by Friday @ midnight)		<pre><html> Total book <head> The cover of the book <title> The title of the book </title></head></html></pre>
			с.	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, or Resources, etc.) Using
				the back button of the browser is not sufficient.
			d.	Content (This can be something very short to something
				very detailed, just keep the topic consistent for all pages)
			e.	Accessible Images (one for each page) You cannot use images within the CSS as your "accessible image" for this requirement. You must include an additional image on
			<u>م</u>	each page.
			t.	Contact Information (for each page) *Hint* You can use
				this as your second page then you wouldn't need to add it
				to every page since it would be linked. The contact
				information does not have to be "real" though you do need to have a working email link.
				t your assignment by midnight, Friday Oct 12,
Week 8	1.	Learning/Using	<u>Requi</u>	<u>red:</u> Watch
Oct 15 –		Dreamweaver to create		
19		an accessible website	•	Create a Website in Dreamweaver CS4 (Template
		using a template.		Tutorial): http://www.youtube.com/watch?v=suMK2pcyqoc
	2	Peer Review Discussion		
	۷.	Board (responses due	•	Template based pages Creating a First Web Site with
		by Friday @ midnight)		Dreamweaver:
				http://www.youtube.com/watch?v=Z2fvx0j1n_k
	3.	Discussion Board		
		(Responses due by	•	Create a website using a Dreamweaver Template and

	Friday @ midnight)	incorporate areas from your assignment 1 homework assignment to make it a functional, working page and post to the Peer Review Discussion Board. Recommended tutorial videos available on Supplemental Course
		Material.
Week 9 Oct 22 - 26	 Learning/Using Dreamweaver to create an accessible website using HTML. Peer Review Discussion Board (responses due by Friday @ midnight) Discussion Board 	Now that you've worked with HTML and CSS coding and used Dreamweaver Templates- you're ready to create your own website using Dreamweaver. <u>Required:</u> Visit the link for setup and review the zip file if needed: <u>http://www.adobe.com/devnet/dreamweaver/articles/first_websi</u> <u>te_pt1.html</u>
	(Responses due by Friday @ midnight)	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 10 Oct 29 – Nov 2	 How to evaluate or test websites for Section 508 Compliance. Assignment 2 (10 Points) - Due Friday @ midnight July 6 Discussion Board (Responses due by Friday, July 6 @ midnight) 	Assignment 2 (10 points) Web Site Validation due Friday @ midnight Nov 2. Using <u>Deque Worldspace</u> and your choice of either <u>FAE</u> or <u>WAVE</u> website validation tools mentioned below, evaluate the accessibility of a <u>Mason</u> website that is inaccessible. Prepare a 1- 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 and your written report. Submit your assignment on the appropriate Discussion Board area.
		<u>Required Read</u> : Interact with Web Standards: Chapter 24: Accessibility Testing pages 426 – 448

How to Test Websites for Compliance

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 Worldspace 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.	
		NOTE If you are trying to use Deque FireEyes then you are using the wrong software. There is nothing to download for this assignment, everything is web-based.	
Week 11 Nov 5 - 9	 Universal Design: Understanding how accessibility is useful for everyone. 	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	
	2. Great Resources for Universal Design: <u>http://www.udlcenter.org/</u> <u>implementation/examples</u>	using a "Universal Design" method can help a majority of individuals, regardless of whether or not they have a disability.	
	3. Learning how to create an accessible document and proper image description to add to your website. (Choose one: PDF, PPT or Word)	 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%</u> 20UDL%20to%20unlock%20potential.pdf 	
	4. For download instructions and recommended documents please visit the Assignment 3 Discussion Board	Fast Facts for Universal Design for Learning: Elements of Good Teaching: <u>http://ada.osu.edu/resources/fastfacts/Universal-Design-FF.pdf</u> <u>Assignment 3 (10 points):</u> 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):	
	5. Assignment 3 (10 Points) – Due @ Midnight Friday Nov 9.	 An image A table (for presentation – simply to show order) A data table (showing specific information) A complex image such as a chart or graph Header Content 	
		Once your inaccessible 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.	
		NOTE you must list the software used to create your accessible	

	1	
		document when posting it to the Discussion Board Assignment section.
		Select your desired Software Option and read the corresponding URL.
		 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</u> <u>Read: http://office2010.microsoft.com/en-us/starter- help/accessibility-checker-</u> <u>HA010369192.aspx?CTT=5&origin=HA010369190</u>
		Mac Users You can also use the Virtual Computing Lab (VCL) mentioned above in the syllabus under recommended software. This will allow you to use the built-in Accessibility Wizard of Office 2010. Unfortunately at this time there is not a "quick" solution for accessible documents on Mac.
Week 12	1. Understanding Accessible Multimedia.	REQUIRED READ: HTML Dog Chapter 10, pages 191 – 205
Nov 12 - 16	2. Discussion Board (Due by	Visit Supplemental Documents for more information on how to detect Google's Youtube captioning.
	Friday @ midnight)	Accessible Multimedia: <u>Required Read:</u> http://webaccess.msu.edu/tutorials/accessible-videos.html
		<u>Required Watch</u> : YouTube has a beta program that attempts to "caption" videos. This is not the same as having captioning embedded into the video. Please see the following as a proper captioned video and audio described example: <u>http://www.youtube.com/watch?v=YQUAs3syuJE</u>
		For anyone interested in learning more after our class: <u>http://www.adainfo.org/content/Webinar-How-to-Create-</u> <u>Accessible-Video</u>
		The required readings and viewings of videos are simply to help you understand the difference in a proper and

Week 13 Nov 19 – 23 Thanksg iving Break	Thanksgiving Break – enjoy and give thanks.	 manually captioned video compared to one using voice recognition and done by YouTube. This is very important to know the difference. You DO NOT have to create a video on your own and caption it for this week or for the final project. Take this time to look ahead and think about your final project. This is a GREAT opportunity to work on extra credit this week! 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.
Week 14 Nov 26 - 30	 Learning about Forms and Whitespace on your website Peer Review Discussion Board (responses due by Friday @ midnight) Discussion Board (Responses due by Friday @ midnight) 	Required Read: HTML Dog Chapter 9, pages 171 – 190 Required Read: Interact with Web Standards Chapter 14, pages 233 – 249 Do "Try it Yourself" on page 242 and submit to the "Peer Review Discussion Board"
Week 15 Dec 3 – 7	 Bringing it All Together Discussion Board (Due by Friday @ midnight) Exam 	Understanding how to pull everything learned from the semester together to create a working, accessible website. <u>Required Read:</u> Chapter 25: Bringing It Together pages 450 – 479 Take Exam (10 points)
Finals Dec 10 - 14	Work on Final Project Final Project is due by midnight Friday, December 14	 Final Project: Accessible Website Development (35 points) Develop an accessible website. This site can be on a topic of your choice and should include at least 5 pages centered on an identified theme. The project must include the following elements (not required per page): Skip Navigation (all pages)

 All images on your site should be accessible (alt tagged) At least one complex image (one that would require a descriptive link, such as a chart, graph, etc.) An accessible table with Column and/or Row Headers A captioned video (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.)
 An 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") A working form can be one that requests information and can be used as a submit by email button back to yourself.
 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? List your requirements above and the page(s) that they are completed on, this helps me to locate items but also works as a checklist for you. (Ex. My captioned video is on my "About Us" page. Etc.)

Hope you had a good semester and a great learning experience in this class. Please remember to take time and fill out the Course Surveys that are located at the top, right of your MyMason Blackboard Courses!