# 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 Spring 2012 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 9 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

# **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:**

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: <a href="http://interactwithwebstandards.com/">http://interactwithwebstandards.com/</a> Ave Cost \$35.00

#### **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)

4. 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 <a href="http://itusupport.gmu.edu/stu\_purch.html">http://itusupport.gmu.edu/stu\_purch.html</a> 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 this course.

Access to a Computer Workstation with:

**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.
  - O Dreamweaver is available in the computer labs in Robinson A350, **STAR Lab**, and **CLUB**. Arlington Campus, contact **Chris Tilley**: 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 **Rick Reo**: 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: **AcademicSuperstore**, **JourneyEd**, **CampusTech** or **Gradware**

to name a few. A free 30-day trial version is available for download from the Adobe website. \*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:

# A. Requirements

	Assignment	Focus Area	Grade	Due Date	Description
1.	Mock Website with 2 pages (index page and content)	HTML	20 points	Friday, March 9 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, April 6 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, April 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,	10 points	Friday, May 4 by midnight	This test covers everything reviewed in the class. It allows for understanding and

5.	Final Web Design Project using Dreamweaver	Dreamweaver, Evaluation, Accessibility of Web, Document and Video Dreamweaver, HTML, CSS and Accessibility	35 points	Friday, May 11 by midnight	how to pull everything learned together.  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
6.	Participation in class online discussions	All focus areas	15 points	Throughout the Semester	Rubric on Syllabus)  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	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.

# D. Grading Scale -

Points	Grade
94-100	A
90-93	<b>A-</b>
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 <a href="http://academicintegrity.gmu.edu/honorcode/">http://academicintegrity.gmu.edu/honorcode/</a>].
- 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 <a href="http://ods.gmu.edu/">http://ods.gmu.edu/</a>].
- Students must follow the university policy for Responsible Use of Computing [See <a href="http://universitypolicy.gmu.edu/1301gen.html">http://universitypolicy.gmu.edu/1301gen.html</a>].

- 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 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 <a href="http://caps.gmu.edu/">http://caps.gmu.edu/</a>].
- 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 <a href="http://writingcenter.gmu.edu/">http://writingcenter.gmu.edu/</a>].

#### PROPOSED CLASS SCHEDULE

Date	<b>Topic/Learning Experiences</b>	Readings and Assignments
Week 1 Jan 23- 27	1. Get acquainted with new 9.1 Blackboard course structure.	1. Blackboard: If you need help with Blackboard please visit the HELP tab on MyMason Portal or visit this link: http://ondemand.blackboard.com/students.htm
	2. Review Syllabus (please email me if you have questions)	2. Weekly Discussion Questions (1 point each week totaling 15 points)
	3. Discussion Questions (Due by Friday midnight 5pm)	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.
	4. Familiarize yourself with Peer Review Discussion Board	3. 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.
	5. Create your Introduction Blog	4. For your final project, you will be creating your own website. Consider this as a starting point for a portfolio.

You can use Cyberduck to create your Mason Website 6. Reviewing your Site setup (Cyberduck or or use Dropbox. For more information on Cyberduck or Dropbox, please visit Syllabus and Documents under Dropbox) **Supplemental Course Materials.** 7. Introduction: Required Read Chapter 22: Accessibility Intro pages 405-412 Overview of Web **Accessibility and What Required:** It is important to understand the differences the Law Says about between WCAG and Section 508. We'll be focusing on Section Web Accessibility, 508, which was originally taken from parts of the WCAG. This Section 508. site breaks this down: http://www.jimthatcher.com/sidebyside.htm 8. The User's **Recommended: Introduction to Web Accessibility:** Perspective: How do http://www.w3.org/WAI/intro/accessibility.php people with disabilities access the web? Required: The Law and Web Accessibility: Section 508: Read Overview of the following one document: technologies used by individuals with Web Accessibility and the Law: disabilities and how http://www.practicalecommerce.com/articles/1167-Webthey can help with Accessibility-and-the-Law testing. Identifying barriers associated OR with these disabilities. **Policies Related to Web Accessibility in the United States:** http://www.w3.org/WAI/Policy/#US **Required: User Perspective:** Choose one of these three videos to watch. World Wide Access: Accessible Web Design: http://www.washington.edu/doit/Video/index.php?vid=35 OR **Keeping Web Accessibility in Mind:** http://webaim.org/intro/video OR **Accessibility: Screen Readers and the Web:** http://www.doit.wisc.edu/accessibility/video/screen\_readers.asp Week 2 1. Building Accessible Often websites are tested with both 1194.21 (Software Applications and Operating Systems) and .22 (Web-based Jan 30 -Websites (Section 508:

**Internet and Intranet Information and Systems) due to the** 

advancement of technology and design of websites.

Feb 3

1194.22 Web-based

**Intranet and Internet** 

Information and Applications) – Learning how Accessibility Helps 2. Group Peer Reviews (responses due by Friday @ midnight) 3. Discussion Board (response due by Friday @ midnight) OR AND

Required Read Chapter 23 pages 413-425. There are various "Try it Yourself" options that will help you have a better understanding of how someone with a disability may have difficulty accessing the computer and inaccessible 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 one another what has been learned.

Required: Review one of the following documents to better understand these standards and how they will help you build a more accessible website:

http://webaccessibility.gmu.edu/docs/access-boardgov\_sec508\_guide\_1194-22-.pdf

http://webaccessibility.gmu.edu/docs/Appendix%20C%20-%20Section%20508%20tips%20for%20Web.pdf

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.

http://webaccessibility.gmu.edu/docs/Appendix%20E%20-%20static%20vpat%20version.pdf

# Week 3 Feb 6 – Feb 10

- 1. Learning basic HTML by using a text editor to incorporate the accessible features into a website.
- 2. Discussion Board (responses due by Friday @ midnight)
- 3. Peer Review Discussion Board (responses due by

Required Readings: 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.

<u>Required Readings:</u> Chapter 5: Writing for the Web: Read pages 60 - 89

Recommended Videos for help using a Text Editor:

		Friday @ midnight)	Introduction to HTML Computer Code: Using an HTML Editor
	4.	I will be posting	http://www.youtube.com/watch?v=EWt1PGz5sXA&cc=1
		additional recommended	
		readings on the Syllabus	<b>How to Use NotePad++ - </b> <u>http://www.youtube.com/watch?v=f-</u>
		and Documents section	<u>lEgoOtlmk</u>
		under "Supplemental	
		Course Material" that	HTML Tutorial 1- Designing a Website in Notepad – Basics
		you may find helpful.	and Beginnings -
		you may mu neipiui.	http://www.youtube.com/watch?v=GOfhmzNLWzY
			Review these resources if you need help building accessibility into your HTML: <a href="http://webaccessibility.gmu.edu/resources.html#section7">http://webaccessibility.gmu.edu/resources.html#section7</a>
			Recommended Readings: Information Architecture Intro: Read chapter 6 pages 95-106
Week 4	1.	Learning basic CSS to	Required Read Chapter 11: CSS Intro. Pages 171 – 196
Feb 13		incorporate the	Remember sometimes adding more code causes more work in
– Feb		accessible features into a	terms of accessibility. You need to have an overview idea of the
17		website.	goal in which you are trying to meet when developing websites
			to know what tools will work best for you to design effectively
	2.	<b>Group Peer Review</b>	and efficiently.
		Discussion Question (responses due by Friday	
			- Practice with the Try it Yourself items on page 178 and 180.
		@ midnight)	Required: Complete Try it Yourself on page 188 and submit by Oct 14. Submit to your Group for Peer Review.
			Required Reading: Building Accessibility into CSS:
			http://dev.opera.com/articles/view/building-accessible-static-
			navigation-wi/
			intrigation with
			Recommended for more help watch:
			-CSS Website Design Tutorial #1 Introduction to CSS:
			http://www.youtube.com/watch?v=9SzJt-kg_ak
			-CSS Website Design Tutorial #2 Formatting and Layout
			Introduction: http://www.youtube.com/watch?v=y59xha5Z8mU
			-CSS Website Design Tutorial #3 Professional Website Layout:
			http://www.youtube.com/watch?v=X8F54z_AHTA
			Recommended: For help on how to incorporate accessibility
			into CSS please review:
			http://webaccessibility.gmu.edu/resources.html#section6

Week 5	1. Continued - Learning	Required Read: Chapter 12: <head> pages 196-211</head>		
Feb 20	basic HTML and CSS by	Complete the "Twy it Venuself" on page 201 and share for the start		
– Feb	using a text editor to	Complete the "Try it Yourself" on page 201 and share feedback		
24	incorporate the accessible features into a	with your Peer Review Group.		
	website.	Required Read: Chapter 13: Headings and Paragraphs pages		
	website.	212-232		
	2. Discussion Board	212-232		
	(responses due by Friday	Required Read: Chapter 15: Links pages 250-266		
	@ midnight)	1 0		
	9 /	If you need more practice you may find it beneficial to try some		
		of the "Try it Yourself" practices and share with the class in the		
		Peer Review Discussion Board.		
Week 6	1. Learning more about	Required Read: Chapter 16: Images pages 267 – 294		
Feb 27	how to build websites –	D 1 1D 1 Cl 4 45 114 205 215		
— Ml	Images and Lists	Required Read: Chapter 17: Lists pages 295 – 315		
March 2	2. Learning how to create	Required Read: Chapter 18: Tables pages 316 – 333		
<b>L</b>	online forms	Required Read. Chapter 16. Tables pages 310 – 333		
	omme forms	Pick 2 "Try it Yourself" practices from the 3 chapters and post		
	3. Discussion Question	to your Peer Review Discussion Board and comment.		
	(Due by Friday @			
	midnight)			
Week 7	1. Assignment 1	Assignment 1 (20 points):		
March	(responses due by			
5 –	Friday @ midnight)	Recommended Reading: Chapter 25: Pages 449 - 479		
March	*Your website must be	Create a mock website with ideas for your final. This mock		
9	posted to your Mason	website must include 2 webpages. For example, this would be		
	<u>Personal Page or</u> <u>Dropbox that was</u>			
	discussed in week 1.*	your home page (index.html) and a content page (i.e. About me,		
	discussed in week 1.	Contact us, Resources, etc.).		
	2. Discussion Board	I will be looking for the following for this assignment:		
	(responses due by	- · · · · · · · · · · · · · · · · · · ·		
	Friday @ midnight)	1) 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: <a href="http://eagle.gmu.edu/mason_template/">http://eagle.gmu.edu/mason_template/</a> .		
		*NOTE* All work must be completed in HTML and		
		CSS code. I will not accept any work designed using a		
		template generator or Dreamweaver.		
		2) Identify the following components on <b>each webpage</b> (worth		
		2 points each)		
		Dece Tide		
		a. Page Title		

Week 8 March 12 – March 16	SPRING BREAK	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 (you can simply use placeholders here. i.e "content will go here" d. Accessible Image (one for each page) e. Contact Information  Submit your assignment by midnight, Friday March 9,  SPRING BREAK – Enjoy your time off!
Week 9 March 19 - March 23	<ol> <li>Learning/Using         Dreamweaver to create         an accessible website         using a template.</li> <li>Discussion Board         (Responses due by Friday         @ midnight)</li> </ol>	Required: Watch Create a Website in Dreamweaver CS4 (Template Tutorial): http://www.youtube.com/watch?v=suMK2pcyqoc  OR  Template based pages Creating a First Web Site with Dreamweaver: http://www.youtube.com/watch?v=Z2fvx0j1n_k  Recommended Resources if you need help:  Entheosweb: http://www.entheosweb.com/website_design/dreamweaver_template.asp Dreamweaver Template Tutorial: http://www.youtube.com/watch?v=Bd5RRCcYXY4 How to Download and Edit Free CSS Templates in Dreamweaver (part 1) http://www.youtube.com/watch?v=UnBJTfGB5es Creating Templates in Dreamweaver http://www.youtube.com/watch?v=V5 -kaDZr6w
Week 10 March 26 – March 30	1. Learning/Using Dreamweaver to create an accessible website using HTML.  2. Discussion Board (Due by Friday @ 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.  Required: Visit the link for setup and review the zip file if needed:  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=fwAIoDgH4mw
		<b>Required:</b> 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 for additional help:
		<b>Introduction to Dreamweaver CS5 Part 1:</b>
		http://www.youtube.com/watch?v=XMZARc_GdLE
		Introduction to Dreamweaver CS5 Part 2:
		http://www.youtube.com/watch?v=GqyXDOQiFLA
		<b>Introduction to Dreamweaver CS5 Part 3:</b>
		http://www.youtube.com/watch?v=_hYTcFA-I50
		Introduction to Dreamweaver CS5 Part 4:
		http://www.youtube.com/watch?v=bKVd9bHusRA
		<b>Introduction to Dreamweaver CS5 Part 5:</b>
		http://www.youtube.com/watch?v=5yU9-87eRww
		Introduction to Dreamweaver CS5 Part 6:
		http://www.youtube.com/watch?v=PHVcTCwVxck
		Introduction to Dreamweaver CS5 Part 7:
		http://www.youtube.com/watch?v=T6sTGQGdI7I
		Dreamweaver CS5 Tutorial Designing Your Web Page:
		http://www.youtube.com/watch?v=HlDi9ThuSsQ
Week	1. How to evaluate or test	Assignment 2 (10 points) Web Site Validation due Friday @
11	websites for Section	midnight, April 6.
April 2	508 Compliance.	
– April	Assignment 2 (10	Using your choice of Deque, FAE or WAVE website validation
6	Points) - Due Friday @	tools mentioned below, evaluate the accessibility of a Mason
	midnight April 6.	website that is inaccessible. Prepare a 1-2 page summary of the
		issues found on the site with suggestions on how to correct
	2. Discussion Board	them. For full credit, you MUST include the validation report
		provided by the tool you choose to use. Submit your
		assignment on the appropriate Discussion Board area.
		Required Read: Chapter 24: Accessibility Testing pages 426 –
		448
		<b>How to Test Websites for Compliance</b>
		There are two ways to test websites: Manual and Automated.
		Manual is using assistive technology such as a screen reader

and Automated uses a testing tool software. We'll review both ways to ensure 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.

# **Automated testing websites:**

Review Free to Low Cost Validators for some of the most commonly used applications used for automated testing: http://webaccessibility.gmu.edu/validators.html

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 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, 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 Discussion Board Assignment #3 post to find an additional document that helps for checking web accessibility visually.

# Week 12 April 9 – April 13

- 1. Universal Design: Understanding how accessibility is useful for everyone.
- 2. Discussion Board (Due by Friday @ midnight)

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.

	1 2 C 4 D 6	D
	3. Great Resources for	<b>Required Reads:</b> Pick 2 of the 3 documents to read:
	Universal Design:	
	http://www.udlcenter.o	1. Universal Design of Instruction (UDI) Article:
	rg/implementation/exa	http://www.washington.edu/doit/Brochures/Academics/instr
	<u>mples</u>	<u>uction.html</u>
		2. Using Universal Design to Unlock the Potential for Academic
		Achievement of At-Risk
		Learnershttp://craigcunningham.com/nlu/tie536fall09/Using%
		20UDL%20to%20unlock%20potential.pdf
		3. Fast Facts for Universal Design for Learning: Elements of Good
		Teaching: <a href="http://ada.osu.edu/resources/fastfacts/Universal-">http://ada.osu.edu/resources/fastfacts/Universal-</a>
		<u>Design-FF.pdf</u>
Week	1. Understanding	Accessible Multimedia: Required Read:
13	Accessible Multimedia.	http://webaccess.msu.edu/tutorials/accessible-videos.html
April 16		
– April	2. Discussion Board (Due	Required Watch: YouTube has a beta program that attempts
20	by Friday @ midnight)	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:
		http://www.youtube.com/watch?v=YQUAs3syuJE
		For anyone interested in learning more after our class:
		http://www.adainfo.org/content/Webinar-How-to-Create-
		Accessible-Video
		EXTRA CREDIT OPTION THIS WEEK: Bookshare Image
		Description worth 5 points. Please visit Syllabus and
		Documents then Supplemental Course Materials for more
		information about this opportunity.
Week	1. Learning how to create an	Assignment 3 (10 points): Create an inaccessible Microsoft
14	accessible document and	Word or PPT document that has the following (this can be
April 23	proper image description	something very short and simple or as complex as you want):
- 27	to add to your website.	some profit as you wantly
	(Choose one: PDF, PPT or	An image
	Word)	A table (for presentation)
	,,, or m)	A data table
	2. For download instructions	
	and recommended	• Header
	documents please visit the	• Content
	Assignment 3 Discussion	
	Board	Once your document is created, run one of the accessibility
	Douta	software options mentioned below to create an accessible
	3. Assignment 3 (10 Points) –	version of your document and submit both documents by
		Friday at midnight.
	Due @ Midnight Friday April 13.	
	Арти 13.	Select your desired Software Option and read the corresponding
	4. Discussion Board	URL.
	4. Discussion Dualu	

	(responses due by Friday	
	@ midnight)	1. Net-Centric PAW (Office 2010) – available for a 30 day
		download or at cost. Required Read:
		http://www.commonlook.com/commonlook-office-
		overview
		2. Virtual 508 – Illinois Accessible Wizard (Office 2007) -
		available for a 30 day download or at cost. <b>Required Read:</b> http://virtual508.com/man-convert.html
		3. Built-In Accessibility Checker in Microsoft Office - Free
		Required Read: http://office2010.microsoft.com/en-
		us/starter-help/accessibility-checker-
		HA010369192.aspx?CTT=5&origin=HA010369190
Week	1. Bringing it All	Understanding how to pull everything learned from the
15	Together	semester together to create a working, accessible website.
April 30	<b>2</b> D D. 1/D	D 1 1D 1 Cl 1 25 D 1 1 1 1 450 470
- May 4	2. Discussion Board (Due by Friday @ midnight)	<b>Required Read:</b> Chapter 25: Bringing It Together pages 450 – 479
	by Friday @ inidinght)	Take Exam (10 points)
		Take Exam (10 points)
	3. Exam	
Finals	Work on Final Project	Final Project: Accessible Website Development (35 points)
May 7 –	Work on Final Project	That I roject. Accessible website Development (33 points)
May 11	Final Project is due by 5 pm	Develop an accessible website. This site can be on a topic of
•	Friday, December 16	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
		At least one image
		• 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)
		Accessible Word, PowerPoint or PDF File (extra credit)
		A 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?

# Assignment rubric

Name:	 	 
Date:		

	No Evidence 1	Beginning (Limited evidence)	<b>Developing</b> (Clear evidence)	Accomplished (Clear, convincing, substantial evidence)	SCORE
CRITERIA (35 points)					
Layout and Navigation					
<ul> <li>Site including a skip</li> </ul>					
navigation link where					
appropriate					
• Is site clear and simple					
to navigate?					
Design					
<ul> <li>Each page indicates</li> </ul>					
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?					
<ul> <li>Site provides good color</li> </ul>					
contrast?					
Site includes proper					
coding for an accessible					
form					
Error Free					
No broken images					
No broken links					
Presentation					
• Did 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?		

Comments: