# LIS 467: Web Development and Information Architecture

Summer 2010 Online Linda W. Braun, Instructor

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**Note**: This syllabus is not a contract. The instructor reserves the right to alter the course requirements and/or assignments based on new materials, class discussions, or other legitimate pedagogical objectives.

### **COURSE DESCRIPTION**

Organizing and structuring content to help individuals, communities, and organizations find and manage internal and external Web-based resources and services. Application of current coding, metadata, and style standards to create Web documents. Evaluation of Web site quality and usability, and assessment of resource discovery tools. Strategic planning and user needs analysis for information architecture. Content inventory, organization, and management in support of wayfinding and navigation. Design documents for prototyping large Web sites. Readings, essays, design projects.

#### **COURSE POLICIES**

- All students are required to attend class on a regular basis unless prior arrangements are made with the instructor.
- All students will complete on time the assignments as outlined in this syllabus. Assignments that are turned in late will automatically lose points unless accommodations have been made with the instructor prior to the due date of the assignment.
- All students will abide by the Simmons College honor code, found in the student handbook and detailed online at http://my.simmons.edu/gslis/resources/studentinfo/honor-code.shtml
- For each assignment that requires essay writing and/or the use of quotes or information from additional sources, students are required to use a consistent and recognizable citation style (MLA, APA, Chicago.) All quoted information must be appropriately cited.
- Assignments should be delivered by uploading files to your web space and linking to the files on your project page on the course wiki.
- Assignments are due by class time of the due date listed on the syllabus.
- Assignments that are late without first contacting me to arrange a revised due date are subject to a loss of points prior to grading.
- Frequent and/or consistent spelling, grammar, and/or style mistakes in written assignments will result in a lesser grade.
- Reasonable accommodations will be provided for students with documented physical sensory, systemic, cognitive, learning and psychiatric disabilities. If you

have a disability and anticipate that you will need reasonable accommodation in this class it is important that you contact the Director of the Academic Support Center, at 617-521- 2471, early in the semester. Students with disabilities are also encouraged to contact their instructors to discuss their individual needs for accommodations. Information on the Academic Support Center is available at http://my.simmons.edu/services/asc.

### STUDENT LEARNING OUTCOMES

- Demonstrate the ability to apply standards relevant to specific information service activities.
- Develop user-centered strategies for solving reference service problems, while demonstrating a command of current issues and trends.
- Analyze, synthesize, and communicate information and knowledge in a variety of formats.
- Assess, create, and evaluate systems for managing content.
- Respond to diversity among individuals and communities through policies, collections, and services.
- Analyze information problems and develop solutions drawing from a wide range of information technology tools and practices.

### **TEXTS**

- Castro, Elizabeth. HTML, XHTML, and CSS (Visual Quickstart), 6th Edition, Peachpit Press, 2006. 978-0321430847
- Cederholm, Dan. Web Standards Solutions, Special Edition, Friends of Ed, 2009, 978-1430219200
- Krug, Steven. Don't Make Me Think. 2nd Edition, 2005. 978-0321344755

### **CLASS PODCASTS**

Each week I will post an audio or video file to the class podcast site that provides an overview of the topic for the week. You can subscribe to this podcast, so it will automatically download to your computer every week, by visiting the class podcast page. The class podcast page URL will be available on the first day of class. The podcasts, along with the class wiki, provide all the information you need in order to complete class assignments and activities. It is required that you listen to the podcast every week as the information presented will help guarantee success in the class.

#### **Course Schedule**

Online via class wiki available at http://gslis.simmons.edu/wikis/lis483spring2010

### **COURSE SCHEDULE**:

Along with the readings, assignments, and topics listed below, each week you will be required to take part in several online activities. Details on each of these are available on the class wiki.

Course	Thomo/Poodings/Eta					
Course Week	Theme/Readings/Etc.					
June 7	Theme: Introduction to the Course/Introduction to CSS , XHTML , and					
	Information Architecture (IA) Concepts					
	Reading/Listening/Viewing					
	<ul> <li>10 Most Common Misconceptions about User Experience Design</li> </ul>					
	<ul> <li>http://tinyurl.com/7geext</li> <li>Experiencing Experience <a href="http://tinyurl.com/lr699r">http://tinyurl.com/lr699r</a></li> </ul>					
	<ul> <li>Castro, Elizabeth HTML, XHTML, and CSS 6th Edition, Chapters 1-</li> </ul>					
	11.					
	Cederholm, Dan. Web Standards Solutions, Special Edition, Friends					
	of Ed, 2009. Introduction,					
	Gillenwater, Zoey Mickley. Flexible Web Design: Types of Web Page      A security better//time and page / pag					
	Layouts http://tinyurl.com/pydtxv  Listen to the interview with Zoey Mickley Gillenwater					
	http://tinyurl.com/rdgmba					
	nttp://tirryun.com/rugmba					
	Weekly Activities					
	Information on weekly activities available on the class wiki					
June 14	Theme: Defining the Architecture					
	Reading/Listening/Viewing					
	<ul> <li>Rosenfeld and Morville, Information Architecture for the World Wide</li> </ul>					
	Web, 3rd Edition, Chapters 1, 3, and 4					
	<ul> <li>First Principles of Web Design</li> </ul>					
	http://www.peachpit.com/articles/article.aspx?p=30600					
	Setting Up Website Categories					
	http://www.peachpit.com/articles/article.aspx?p=30916  Elements of Social Architecture					
	<ul> <li>Elements of Social Architecture</li> <li>http://www.alistapart.com/articles/theelementsofsocialarchitecture/</li> </ul>					
	Elements of Social Architecture					
	Paper Version of the Web http://deeplinking.net/paper-web/					
	appli verdien en une vves mapanacopiimang.neu paper wesh					
	Weekly Activities					
	Information on weekly activities available on the class wiki.					
	Due: Creative Brief & Code Trial 1					
June 21	Theme: Eyes on the Screen & Writing for the Web					
	Reading/Listening/Viewing					
	Introduction to Eyetracking http://tinyurl.com/kmbah					
	<ul> <li>F-shaped Pattern for Reading Web Content <a href="http://tinyurl.com/ke8rt">http://tinyurl.com/ke8rt</a></li> <li>Key findings of 2007 Eyetracking study</li> </ul>					
	http://eyetrack.poynter.org/keys 01.html (Read through all of the					
	findings.)					
	Eyetracking Web Usability: Images					
	Lyonaoming woo coadmity. Imageo					

	http://www.peachpit.com/articles/article.aspx?p=1412019				
	<ul> <li>Visual Decision-Making http://www.alistapart.com/articles/visual-</li> </ul>				
	decision-making				
	<ul> <li>Van Schalk, Paul and Jonathan Ling. The role of context in</li> </ul>				
	perceptions of the aesthetics of web pages over time. International				
	Journal of Human-Computer Studies, January 2009, Pages 79-89				
	odumai di Human-ddinputer dituties, danuary 2003, Fages 13-03				
	Weekly Activities				
	Weekly Activities				
	Information on weekly activities available on the class wiki.				
	D - 01/-14				
	Due: Site IA				
June 28	Theme : Usability Testing & Creating a Look & Feel				
	<ul> <li>Paper Prototyping <a href="http://www.alistapart.com/articles/paperprototyping">http://www.alistapart.com/articles/paperprototyping</a></li> </ul>				
	<ul><li>Usability.gov sections on:</li></ul>				
	<ul> <li>What is Usability Testing</li> </ul>				
	http://www.usability.gov/refine/learnusa.html				
	<ul> <li>Develop the test plan</li> </ul>				
	http://www.usability.gov/refine/testplan.html				
	Create Final Scenarios				
	http://www.usability.gov/refine/scenarios.html				
	Recruit Participants <a href="http://www.usability.gov/refine/recruit.html">http://www.usability.gov/refine/recruit.html</a>				
	http://www.usability.gov/refine/testsessions.html				
	<ul> <li>Conduct the usability test</li> </ul>				
	http://www.usability.gov/refine/usabilitytest.html				
	<ul> <li>Analyze the results <a href="http://www.usability.gov/refine/results.html">http://www.usability.gov/refine/results.html</a></li> </ul>				
	<ul> <li>Prepare the usability report</li> </ul>				
	http://www.usability.gov/refine/prepusareport.html				
	<ul> <li>Analyze and retest</li> </ul>				
	http://www.usability.gov/refine/implement.html				
	<ul> <li>Why Mood Boards Matter</li> </ul>				
http://www.webdesignerdepot.com/2008/12/why-mood-board					
	matter/				
	<ul> <li>Read three articles from the graphic design section from the last two</li> </ul>				
	years of A List Apart				
	http://www.alistapart.com/topics/design/graphicdesign/				
	Thep://www.anotapart.oom/topioo/doorgrapmodoorgra				
	Weekly Activities				
	Information on weekly activities available on the class wiki.				
	information on weekly activities available on the class wiki.				
	Duoi CodoTriol ii				
lub. E	Due: CodeTrial ii				
July 5	Theme: Advanced Styles, SEO, & Hacks				
	Deading/Listoning/Misseing				
	Reading/Listening/Viewing				
	<ul> <li>Cederholm, Dan. Web Standards Solutions, Special Edition, Friends</li> </ul>				

	of Ed, 2009. Please read the entire book by this week.					
	<ul> <li>CSS Hacks <a href="http://www.webdevout.net/css-hacks">http://www.webdevout.net/css-hacks</a></li> </ul>					
	<ul> <li>The 7 CSS Hacks we Should Use <a href="http://www.noupe.com/better-">http://www.noupe.com/better-</a></li> </ul>					
	design/7-css-hacks-you-cannt-live-without.html					
	<ul> <li>CSS Filter on Wikipedia <a href="http://en.wikipedia.org/wiki/CSS">http://en.wikipedia.org/wiki/CSS</a> filter</li> </ul>					
	<ul> <li>Krug, Steve, Don't Make Me Think, Chapter 3.</li> <li>Lancaster, Jason. The Secret of SEO Success. Ward's Dealer</li> </ul>					
	Business, December 2009 pages 32-33.					
	<ul> <li>Cahill, Cay. Optimal Results: What Librarians Need to Know About</li> </ul>					
	Google & Search Engine Optimization. The Reference Librarian,					
	July/September 2009, pages 2354-247.					
	<ul> <li>Breeding, Marshall. Winning the Competition for Attention on the</li> </ul>					
	Web. Computers in Libraries, June 2008.					
	<ul> <li>Castro, Elizabeth. HTML, XHTML, and CSS 6th Edition, Introduction</li> </ul>					
	and chapters 14 and 24.					
	<ul> <li>Listen to the interview with Aaron Walter <a href="http://tinyurl.com/ghtwk7">http://tinyurl.com/ghtwk7</a></li> </ul>					
	Weekly Activities					
	Information on weekly activities available on the class wiki.					
	information on weekly activities available on the class wiki.					
	Due: Wireframe & Usability Testing Plan					
July 12						
July 12	Theme: Content Management Systems (CMS)					
	Booding/Viewing/Lietoning					
	Reading/Viewing/Listening					
	Web Content Management System on Wikipedia					
	http://en.wikipedia.org/wiki/Web_content_management_system					
	What does a Content Management System Do?  The state of					
	http://www.techsoup.org/learningcenter/webbuilding/archives/page93					
	47.cfm					
	<ul> <li>Read about the CMS Showdown at SXSW 2009</li> </ul>					
	http://www.cmswire.com/cms/web-cms/sxsw-web-content-					
	management-system-showdown-update-2-004124.php					
	<ul> <li>Clark, Dave. Content Management &amp; the Separation of Presentation</li> </ul>					
	and Content. Technical Communication Quarterly, Winter 2008Ed,					
	2009. Please read the entire book by this week.					
	Weekly Activities					
	Information on weekly activities available on the class wiki.					
	Russ One Bone Coded					
Luly 40	Due: One Page Coded					
July 19	Theme: Going Mobile					
	Booding/Viewing/Lietoning					
	Reading/Viewing/Listening					
	Four Key Principles of Mobile User Experience Design     Http://beyes.org/design/fey/fey/fey/fey/fey/fey/fey/fey/fey/fey					
	http://boxesandarrows.com/view/four-key-principles					
	Mobile Web Design Trends for 2009     Manual Action Company (2000) (04/42/packille week designs)					
	http://www.smashingmagazine.com/2009/01/13/mobile-web-design-					

	trends-2009/				
	<ul> <li>Return of the Mobile Stylesheet</li> </ul>				
	http://www.alistapart.com/articles/return-of-the-mobile-stylesheet/				
	Weekly Activities				
	Information on weekly activities available on the class wiki.				
July 26	Theme: Thinking Forward				
	<ul> <li>Reading/Listening/Viewing</li> <li>Five Steps to Building Social Experiences         http://boxesandarrows.com/view/5-steps-to-building     </li> <li>Get Ready for HTML 5 http://www.alistapart.com/articles/get-ready-for-html-5/</li> </ul>				
	Weekly Activities Information on weekly activities available on the class wiki.				
	Due: Final Site				

### **ASSIGNMENT OVERVIEW & DATES**

Assignment Title	# of PTs	Due Date
Code Trial 1	5	June 20
Creative Brief	10	June 20
Site IA	10	June 27
Code Trial 2	5	July 4
Wireframe	10	July 11
Usability Plan	10	July 11
One Page Coded	15	July 18
Final Site	20	July 25
Collaboration/Class	15	Throughout class
Participation		

Each of the assignments required for this class build upon each other and lead to the final site you need to complete by November 29. Designing a website is a process that includes regular revision. You should be prepared to revise the assignments you complete after receiving instructor feedback.

All assignments should be delivered by uploading files to your web space and then linking to the file(s) on your student project page located on the course wiki.

# **Class Collaboration & Participation**

The first week of class you will form a team with three other classmates. Throughout the semester you will work together providing each other with feedback on the class projects and weekly activities as well as helping each other in making decisions about

your site, its audience, and purpose. Every two weeks I will meet with your group virtually to talk about how you are doing, answer questions, and discuss course content. We will setup these meetings during the first two weeks of class. This collaboration will be evaluated as a part of the class participation grade.

Class participation will also be graded on active involvement in wiki activities and discussions. This includes completing activities assigned during online weeks at the time they are due, and participating fully in any wiki-based discussions we may have as a class. Participating fully in this case means adding to the wiki with more than "I agree" and also adding to the discussion during the entire week of that discussion and not just once.

### Total points for collaboration & class participation = 15

### Code Trial 1

For the first code trial you need to create a web page about yourself that uses CSS and XHTML techniques covered so far in the class. The look and feel of the page along with the content should inform me, and your classmates, about you.

When the code and CSS is complete you need to upload the files (along with any images you are using) to your Simmons web space. Information on how to upload to your web space is available on the course wiki.

Once you have uploaded your files you should create a link on your wiki student project

# **Grading for Code Trial 1**

For this assignment students will receive all 5 points by demonstrating use the HTML and CSS techniques covered in the first week's of class. This goal of the assignment is to get students in the class writing code immediately and is designed to give me a chance to discover what isn't making sense for each student, and provide feedback accordingly.

Full credit will not be given if the assignment is turned in late –without permission before the date it is due.

#### Due June 20

#### Creative Brief

A creative brief outlines the purpose and audience for a website. It allows those working on a website to analyze what they hope to achieve and look at similar resources and "competition" in order to articulate in writing a framework for the site. At each of the

steps in the web building process you will review the creative brief in order to guarantee that you remain on target with the final product.

A template for the creative brief is available on the course wiki. You will complete the template for this assignment. When the template is complete you will upload it to your Simmons web space and link to it on your student project page on this wiki.

## **Grading for the Creative Brief**

- Up to 2 points for answering each question on the creative brief template and in the form and detail specified for each.
- Up to 5 points for including complete answers to each question on the creative brief template. For example, when asked to include the title, URL, and specifics about what works or doesn't work for sites similar to the one the student is working on, all of those components have to be included.
- Up to 3 points for demonstrating time and thought spent considering the audience, goals, and style of the site. These will be demonstrated through the information provided on the creative brief that shows answers directly connect to what the student will work on. For example, the list of competitors has a direct connection to the site under development, the imagery mentioned fits with the audience and purpose, and so on.

Points will be taken off if the assignment is turned in late –without permission before the date it is due.

### **Total Points for the Creative Brief = 10**

### Due June 20

### Code Trial 2

In this second code trial you need to expand on the techniques and styles you used for the first code trial. This code trial should include a header section and at least three columns. The content is up to you.

When the code and CSS is complete you need to upload the files (along with any images you are using) to your Simmons web space. Information on how to upload to your web space is available on the course wiki

Once you have uploaded your files you should create a link on your wiki student project page(s) to the first page of code that you are submitting.

### **Grading for Code Trial 2**

Code trial 2 will be graded on the integration of feedback from code trial 1 and integration of new HTML and CSS techniques discussed prior to the assignment dues date.

Points will be taken off if the assignment is turned in late –without permission before the date it is due.

# Total points for Code Trial 2 = 5

# Due July 4

#### Site IA

The way a site is organized, the information architecture, can make or break its success. It's important to work out an information architecture plan early in the development process as that sets the flow of the content of the site. For this assignment you will create an IA using a piece of software of your choice. Possible products to use include:

- Inspiration
- Visio
- Bubbl.us
- Gliffy
- Mindmeister

#### The IA should include:

- A structure that demonstrates how pages of the site connect (and don't connect) to each other.
- Labels for each of the sections and pages of the site. (These should be the labels you plan on using in the final design. They may change but try to be as accurate as possible in the IA that you develop for this assignment.)

IA examples are available on the class wiki

When your site IA is complete you should upload the file to your Simmons space and create a link to the diagram on your wiki student project page(s.)

### Grading for Site IA

- Up to 4 points for the development of an information architecture diagram that includes all of the pages of the site and demonstrates how the pages connect to each other.
- Up to 4 points for a labeling system for pages that shows the use of terms and phrases that are appropriate to the audience and purpose of the site. For example, if creating a site for teachers, the language used in the IA should reflect teacher understanding of content provided.
- **Up to 2 points** for including persistent, secondary, and tertiary elements in the diagram as needed.

Points will be taken off if the assignment is turned in late –without permission before the date it is due.

#### Due June 27

#### Wireframe

The wireframe is a visual representation of the front page and (in this case) one internal page of the site. This visual composite helps to take what you have developed in writing only so far (the creative brief and IA) into visual form. The comp. you create for this class should show the:

- Layout you are planning for the front page and one internal page of the site (this should include all navigation, labels, image placement, headings, and text placement.)
- Navigation for the site including labels that are as accurate as possible at the time you finish the assignment.
- Placement of images on the page. You should use images that represent as closely as possible the actual images you will use on the site.
- Location, size, and type of headings you will use on the page.
- Placement of text on the page that shows size, type, and so on.

Wireframe examples are available on the course wiki.

When you complete your wireframes you should upload them to your Simmons web space and place a link on your student project page to the completed files.

# **Grading for the Wireframes**

- Up to 2 points for creating a wireframe for the home page and one internal page
- Up to 4 points for creating wireframes that include full details on layout including placement of images, navigation, headings, text, etc.
- **Up to 4 points** for including full information on the colors, fonts, and sizes of text, images, and elements to be included on the pages covered in the wireframes.

Points will be taken off if the assignment is turned in late –without permission before the date it is due.

# **Total points for wireframes = 10**

# Due July 11

### **Usability Testing Plan**

If you build a website that isn't easy for your audience to use you have basically failed in the task. It's important to test the site with users at several points along he way in the development process. You won't be able to do that in this class. However, for this assignment you should develop a user-testing plan that you could integrate into a real-world web design project.

Examples of usability testing plans are available on the class wiki. When developing your own plan:

- Be specific about the techniques you outline for each of the user-testing goals.
- Be specific about why you think this is an appropriate technique to use for the goal.
- Be specific about what point in the development process you would institute the technique and why you think that is the right time.
- How you would go about getting the testing off the ground

When your user testing plan is complete you should upload the file to your Simmons web space and place a link that file on your wiki project page.

# **Grading for Usability Testing Plan**

- Up to 1 points for at least 8 questions and scenarios that relate to testing for the site under development.
- Up to 3 points for inclusion of full scenarios that include details that put the person taking the test in a specific framework
- **Up to 3 points** for including specific reasons for why each question or scenario will help to provide information about the success of the site.
- **Up to 3 points** for including questions at the beginning and end of the plan that at the start help give the person taking the test an opportunity to become comfortable with the site and the experience and at the end help to provide opportunities for processing thoughts about the site.

Points will be taken off if the assignment is turned in late –without permission before the date it is due.

Total points for Usability Testing Plan = 10

# Due July 11

# One Page Coded

Once you create the wireframe for your site it's time to turn that look and feel into an actual web page. For this assignment you need to do just that. Turn the design in your head and on paper into an actual web page that includes images, links, navigation, and blocks of content. In grading and reviewing the page of code I will look at the implementation of the code, navigation, and design.

The feedback you receive on this page will help you move forward in coding the rest of the site.

When your page is coded you should upload the files and images to your Simmons web

space and then place a link on your wiki student project page(s) to the first page.

# **Grading for One Page Coded**

- **Up to 4 points** for integrating the design of the original wireframes (along with instructor feedback) into the page design.
- Up to 4 points for using HTML and CSS techniques discussed in the class including flexible and elastic design.
- Up to 2 points for validating the HTML at the W3C
- Up to 2 points for validating the CSS at the W3C
- Up to 3 point for including all page content text, headings, navigation, images, colors, etc.

**Please Note**: This assignment is a student's opportunity to try things out for and receive feedback on their final site. If a technique is unclear or code isn't working as expected, if comments are included in the HTML and CSS files explaining what was confusing, not working, etc. that will be taken into account at grading.

Points will be taken off if the assignment is turned in late –without permission before the date it is due.

### Total points for One Page Coded = 15

### Due July 18

#### **Final Site**

After completing each of the previous assignments you should have a good idea of what your site is going to look like, the content it will include, and how the pages do and do not connect to each other. For the final assignment you need to complete a minimum of 7 pages of the site you've been working on for this class. The site should include:

- A consistent navigational structure that meets the needs of the audience and purpose of the site
- A consistent design that meets the needs of the audience and purpose of the site
- Images that support the audience and purpose of the site
- Text that is written is a style appropriate to the audience and purpose of the site and the web format
- Colors that support the needs of the audience and purpose of the site

When your site is complete you should upload all files to your Simmons web space and then link to the main site of your web page on your student project page.

# **Grading for the Final Site**

- **Up to 5 points** for integrating the design of the original wireframes (along with instructor feedback) into the page design.
- **Up to 5 points** for using HTML and CSS techniques discussed in the class including flexible and elastic design.

- Up to 2 points for validating the HTML at the W3C
- Up to 2 points for validating the CSS at the W3C
- **Up to 3 points** for including all page content text, headings, navigation, images, colors, etc.
- Up to 3 points for integrating feedback from the instructor on design, code, and content. Please note: If instructor feedback is not integrated, comments need to be included in the code as that fully explains why the feedback was not used and should be directly connected to the site audience and purpose.

Points will be taken off if the assignment is turned in late –without permission before the date it is due.

**Total points for the Final Site = 20** 

Due July 25

