

LSC 610 Internet Searches & Web Design

Catholic University of America
School of
Library and Information Science
Spring Semester 2009

Tools and Technologies

Description General Schedule Readings Assignments

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COURSE DESCRIPTION

This course is designed for students interested in becoming skilled Internet searchers and creative designers of web sites. It covers: Internet search tools, search engine architecture, search techniques and strategies, evaluation of information resources, analysis of web sites, and application of information architecture principles to web site design. By means of lectures, discussions, exercises, projects, presentations, and hand-on activities, students will learn the advanced features, strengths, and limitations of search tools and the principles of user-centered design. Students will learn the basics of HTML and Dynamic HTML and will have hands-on-practice in creating websites by using HTML editors such as Composer and Dreamweaver. Students will acquire experience in adding graphics and interactivity to websites by the use of a variety of techniques and by programs such as Photoshop and Fireworks.

OBJECTIVES

Students completing the course will:

- Be extensively acquainted with a range of Internet search engines and search engine capabilities, and be able to analyze the strengths, and weaknesses of search tools.
- Have developed advanced searching skills.
- Be able to evaluate Websites and Web resources.
- Understand the role of information architecture principles in the design and maintenance of websites
- Know the basics of HTML, (X)HTML, and CSS coding.
- Be able to effectively create websites using Web editors such as Kompozer and Dreamweaver.
- Be able to create graphics and make their websites dynamic and interactive by the use of JavaScript, animations, image maps, forms, and other techniques
- Understand and be able to apply usability and accessibility principles to website design.
- Understand the role and challenges for information professionals in the context of these information technologies and the resulting environment.

GENERAL INFORMATION

Day, Time, and Location

Thursdays -- 5:10pm -7:40pm -- Marist 208

Office Hours

Consultations can be arranged ahead of time for either before or after class. Students are also encouraged to contact the instructor by phone or email.

Advanced Students

It is recognized that there may be a wide range of experience and knowledge among members of the class. At the beginning of the class, some students may be able to demonstrate proficiency regarding some of the content and activities. Students who feel they fall in that category should speak with the instructor early in the course and alternative activities can be discussed. It is the intent that all students leave the course not only having met the objectives stated for the class, but with significantly enhanced knowledge and skills. For any students who feel they are not being adequately challenged by the standard assignments, it is the responsibility of the student to discuss this with the instructor so that alternatives may be arranged.

Attendance

Attendance and participation at all classes is expected. Emergencies and illnesses of course do arise. If you find that extenuating circumstances are going to require that you must miss more than the equivalent of one class, please contact the instructor, ahead of time if possible, to discuss whether the absence is excusable, if a make-up assignment is required, etc.

Timely Submission of Assignments

It is expected that assignments will be submitted on time. Out of fairness to the students who do submit their assignments on time, the following penalties will be applied to assignments received after the due date: 5 points off for assignments submitted one day after the due date, 1 additional point off for each additional day late.

Other General Information

Please see the sections at the end of this page regarding [ADA Accommodation](#) and [Academic Integrity](#).

A collection of [HTML Resources](#) for this course can be found at faculty.cua.edu/HOCK/htmlresources.html. Additional resources can be found on BlackBoard.

SCHEDULE (Details Subject to Change)

Session	Topic	Assignment Due
1 - Jan 15	<p>Introduction to the Course</p> <p>The role of the information professional in Web searching and Web design</p> <p>Internet Search Tools and How They Fit Together: Directories, Resource Guides, and Search Engines</p> <p>Search Engine architecture: How search engines are put together and how that affects the searcher and searchability.</p> <p>The Major Engines: Analysis and Comparisons (Google, Yahoo!, Ask.com, MSN, Exalead)</p> <p>Advanced Search Options – Boolean, Field Searching, etc.</p> <p>Read for next week:</p> <p><i>Hock, Randolph. The Extreme Searcher's Internet Handbook. 2nd ed. Cyberage Books. Medford, NJ. 2007. Chaps 2-4.</i></p> <p><i>Hock, Randolph. "The Elements of Advanced Search". Online. (Weston, Conn.) v. 32 no. 4. July-Aug 2008</i></p>	

	<p><i>"How does Google collect and rank results?" Google Librarian Central. www.google.com/librariancenter/articles/0512_01.html</i></p>	
2 - Jan 22	<p>Search Strategies</p> <p>Advanced Search Options (continued)</p> <p>The "Other " Search Engine Databases - Images, Audio, Video, Groups, News, etc.</p> <p>Search Engine Special Features (Shortcuts, etc)</p> <p>Read for next week:</p> <p><i>Hock, Chaps. 5, 8</i></p> <p><i>Arnold, S. E. "Relevance and the End of Objective Hits" [Cover story]. Online (Weston, Conn.) v. 29 no. 5 (September/October 2005) p. 16-21. (Available on Aladin)</i></p>	Assignment 1 - Search Exercises I
3 - Jan 29	<p>The "Other " Search Engine Databases - Images, Audio, Video, Groups, News, etc.</p> <p>Read for next week:</p> <p><i>Bradley, Phil. "Image Search Engines". Ariadne (Online) no. 45 (October 2005) p. 1 www.ariadne.ac.uk/issue45/search-engines/</i></p> <p><i>"Bradley, P. "Using the Right Search Engine at the Right Time" . Ariadne (Online) no. 43 (April 2005) p. 1.</i></p> <p><i>Price, Gary., et. al., "Exploring the invisible Web: seven essential strategies". Online (Weston, Conn.) v. 25 no. 4 (July/August 2001) p. 32-4. (Available on Aladin)</i></p>	Assignment 2 - Search Exercises II
4 - Feb 5	<p>Searching the Deep Web</p> <p>Visualization Engines Metasearch – Uses and Cautions Specialty Search Engines</p> <p>Read for next week:</p> <p><i>Notess, Greg. R. "The Terrible Twos: Web 2.0, Library 2.0, and More". Online (Weston, Conn.) v. 30 no. 3 (May/June 2006). (Available on Aladin)</i></p> <p><i>Tyburski, Genie, "Evaluating the Quality of Information on the Internet" The Virtual Chase. www.virtualchase.com/quality/index.html.</i></p> <p><i>Plosker, George R. "The Time Has Come for Visual Search". Online. v. 30 no. 4 (July/August 2006) p. 45-7. (Available on Aladin)</i></p> <p><i>Foenix-Riou, Beatrice. Visualization Technologies. Online. 30 no. 2 (March/April 2006). p. 29-32. (Available on Aladin)</i></p>	Assignment 3 - Search Exercises III
5 - Feb 12	<p>Web 2.0 - Bridging Search and Design, The User and the Producer</p> <p>Web 2.0</p> <p>Website Structure</p> <p>Information Architecture and Web Design Layout</p> <p>Site Structure and File Structure</p>	Assignment 4 - Search Exercises IV

	<p>Read for next week:</p> <p><i>Castro. Introduction</i></p> <p><i>Web Style Guide: Basic Design Principles for Creating Web Sites. Peter J. Lynch and Sarah Horton Chapter 1.</i></p> <p><i>Rosenfeld & Morville Chaps 1, 3-5</i></p>	EXERCISES IV
6 - Feb 19	<p>Introduction to HTML, and (X)HTML Coding</p> <p>The Structure of Code, Headings, Links, Formatting, Images, Backgrounds, Lists, Tables</p> <p>The Differences between HTML, XML, and (X)HTML</p> <p>Website Design and Resources Analysis</p> <p>Read for next week:</p> <p><i>Web Style Guide: Basic Design Principles for Creating Web Sites. Peter J. Lynch and Sarah Horton Chapters 2-4.</i></p> <p><i>Castro. Chapters 1-3</i></p> <p><i>W3Schools HTML Tutorial. (1st 8 items from the table of contents on the left - "Home" through "Links")</i></p>	
7 - Feb 26	<p>Graphics</p> <p>Image Editing Using Photoshop, Photoshop Elements, and Fireworks</p> <p>Read for next week:</p> <p><i>Castro. Chapters 4-6.</i></p>	Assignment 5 - Web Page 1 (hand-coded, with table and other basic elements)
8 - Mar. 12	<p>Cascading Style Sheets (CSS)</p> <p>Read for next week:</p> <p><i>Castro. Chapters 7-11</i></p>	
9 - Mar 19	<p>Web Page Editors - Composer and Dreamweaver</p> <p>Read for next week:</p> <p><i>Web Style Guide: Basic Design Principles for Creating Web Sites. Peter J. Lynch and Sarah Horton Chapters 5-6. .</i></p> <p><i>Castro. Chapter 17 - Forms</i></p>	Assignment 6 - Web Page 2 (with CSS)
10 - Mar 26	<p>Web Page Editors (Part 2):</p> <p>Adding Forms and Other Elements</p> <p>Website Design and Resources Analysis</p> <p>Read for next week:</p> <p><i>Castro. Chapter 11</i></p>	Assignment 7 - Web Page 3 (done with editor and including

	<p><i>Web Style Guide: Basic Design Principles for Creating Web Sites. Peter J. Lynch and Sarah Horton Chapters 2-4.</i></p> <p><i>Guenther, K. Assessing Web Site Usability. Online (Weston, Conn.) v. 27 no. 2 (March/April 2003) p. 65-8. (Available on Aladin)</i></p> <p><i>Selected Readings, from the Web, on Usability</i></p>	edited images and other specified elements)
11 - Apr 2	<p>Usability and Accessibility</p> <p>Usability Criteria and Testing</p> <p>Accessibility – The Why’s and How’s</p> <p>Read for next week:</p> <p><i>Rosenfeld & Morville Chaps 6-7</i></p> <p><i>Castro. Chapter 12</i></p>	
12 - Apr 16	<p>Making Pages Dynamic: JavaScript, Animations, Image Maps, Frames</p> <p>Read for next week:</p> <p><i>Dynamic Drive: DHTML Scripts for the Real World. www.dynamicdrive.com (Explore what this site offers.)</i></p> <p><i>Multiformat, Multimedia Resources on the Web. onstrat.com/multimedia.html (explore these sites.)</i></p>	Assignment 8 - Website analysis
13 - Apr 23	<p>Multimedia on Websites</p> <p>Server Technology</p> <p>Uploading</p> <p>Webmaster Tools</p> <p>Read for next week:</p> <p><i>Castro. Chapter 18.</i></p> <p><i>Developing a Web Culture. Online (Weston, Conn.) v. 30 no. 3 (May/June 2006) p. 58-60 (Available on Aladin)</i></p>	Assignment 9 Web Page 4 (including JavaScript, animation, image map)
14 - Apr 30	<p>Review of issues and the role of the information professional in this context</p> <p>Final Project Presentations</p>	Assignment 10 - Final Project

READINGS

Readings will come from the following text and from articles or other readings that will be available as either handouts, on Aladin, elsewhere on the Web, or on reserve at LOC.

Text: Castro, Elizabeth. *HTML, XHTML & CSS*, 6th Edition. Peachpit Press. Berkeley, CA. 2007.

Some readings will come from the following two books, which will be on reserve in Mullen Library. It is strongly recommended that

students purchase the Castro book.

Rosenfeld, Louis and Peter Morville. *Information Architecture for the World Wide Web*. 2nd Edition. O'Reilly. Sebastopol, CA. 2002. TK5105.888 .R67 2002

Hock, Randolph. *The Extreme Searcher's Internet Handbook, 2nd Ed*. CyberAge Books. Medford, NJ. 2007. ZA4230 .H63 2007

Also see additional resources at [HTML Resources](#)

ASSIGNMENTS AND GRADING

Details for the following assignments will be distributed in class.

Assignment 1 - Search Exercises I

Assignment 2 - Search Exercises II

Assignment 3 - Search Exercises III

Assignment 4 - Search Exercises IV

Assignment 5 - Web Page 1 (hand-coded, with table and other basic elements)

Assignment 6 - Web Page 2 (with CSS)

Assignment 7 - Web Page 3 (done with editor and including edited images and other specified elements)

Assignment 8 - Website analysis

Assignment 9 - Web Page 4 (including JavaScript, animation, image map)

Assignment 10 - Final Project

Each of the first 9 assignments = 7% of the final grade

Final Project = 25%

Attendance and Participation = 12%

Unless there are very extenuating circumstances, missing more than two classes will cause a loss of 6 attendance/participation points for the 3rd class missed and 6 attendance/participation points for the 4th class missed.

Grading Scale

A (100-94)

A- (93-90)

B+ (89-85)

B (84-82)

B- (81-79)

ADA (Americans with Disabilities Act) Accommodation

Students with disabilities requiring accommodation under federal regulations must present a written accommodation request to the instructor by the second class meeting . It is strongly recommended that the student contact the Office of Disability Support Services , Suite 207, Pryzbyla Center (202-319-5211; email cua-disabilityservices@cua.edu, web <http://disabilitysupport.cua.edu/>). This is the University office responsible for disability accommodation and services, and its staff can answer questions about services and requirements regarding documentation. Special accommodations or other arrangements cannot be made without documentation approved by this office.

Academic Honesty

Academic honesty is expected of all CUA students. Faculty are required to initiate the imposition of sanctions when they find violations of academic honesty, such as plagiarism, improper use of a student's own work, cheating, and fabrication. The following sanctions are presented in the University procedures related to Student Academic Dishonesty (from policies.cua.edu/academicundergrad/integrityprocedures.cfm): "The presumed sanction for undergraduate students for academic dishonesty will be failure for the course. There may be circumstances, however, where academic dishonesty because of an undiagnosed student"

dishonesty will be failure for the course. There may be circumstances, however, where, perhaps because of an undergraduate student's past record, a more serious sanction, such as suspension or expulsion, would be appropriate. In the context of graduate studies, the expectations for academic honesty are greater, and therefore the presumed sanction for dishonesty is likely to be more severe, e.g., expulsion. ...In the more unusual case, mitigating circumstances may exist that would warrant a lesser sanction than the presumed sanction." Talk with your instructor if you have questions about what is involved in such offenses.

Plagiarism, which includes "[1] intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise; [2] failure to attribute any of the following: quotations, paraphrases, or borrowed information from print sources or websites; [3] buying completed papers from other to use as one's own work", will not be tolerated. For more on what constitutes plagiarism and how to avoid it, please read (carefully) Margaret Proctor's "How to Avoid Plagiarism" (www.utoronto.ca/writing/plagsep.html). Please review the complete texts of the University policy and procedures regarding Student Academic Dishonesty, including requirements for appeals, at policies.cua.edu/academicundergrad/integrity.cfm.