# LIS650

## Web Site Architecture and Design

2004–07–24

See the course web site at http://openlib.org/home/krichel/courses/lis650p04a for the latest online version of this file.

**Course Description**
This course focuses on the construction of a web site. In an introductory session, we examine some general principles that set asside good web sites from lousy ones. Students than two weeks time in which to assess a web site, and prepare a statement what their own web site will be about.
After the introductory sessions, students will start to build their own web sites. They will be provided with free web space where they can design their own sites. This web space will be available even after the course ends.
The course will not deal with using an application package to compose pages. Instead, students will be taught how to hand-code the pages. The emphasis is on the use of standard compliant XHTML 1.0 and CSS level 2.1. Validity control will be an integral part of the composition process. Students are allowed whatever tool they wish to use to create their sites, but final project sites must be standards compliant.
The course will cover all of XHTML, except the following

- forms
- frames
- minor points of table construction

The course will cover most, but not all of CSS 2 revision 1. At the time of writing, this is a draft W3C recommendation. Finally, the course will, for the first time, include an introduction to javascript. Students will not be required to use it in their web sites.

**Course objectives**
After taking this course students

- they will be able to interact with a UNIX based server for storage and retrieval of pages;
- they will understand fundamental concepts of http;
- they will have sufficient knowledge of HTML in order to create simple but interoperable pages;
- they will have sufficient knowledge of CSS in order to create simple style sheets;
- they will have been introduced to javascript
- they will have a grounding in information architecture and web usability

**Prerequisites**
There are no other formal prerequisites for this course. However this course is not suitable for technophobes. Students should be able to use a Microsoft Windows XP computer, e.g. click on an icon to run a program. Students should also be familiar with basic concepts of computer hardware and software, concepts like files, memory, characters, bytes etc. They should have general idea as well as a basic understanding of the Internet and of its client/server architecture. Everything that goes beyond that will be explained in class or by personal tuition from the instructor. No prior knowledge of HTML and CSS is assumed.

**Instructor**
Thomas Krichel

Palmer School of Library and Information Science
C.W. Post Campus of Long Island University
720 Northern Boulevard
Brookville, NY 11548–1300
krichel@openlib.org
work phone: +1–(516)299–2843
Private contact details may be obtained from the online CV at /home/krichel/cv.html.

**Class structure**
Each class will have a lengthy presentation by the instructor. For some small part of class time the students will work directly with their computers under the supervision of the instructor. However, give the hefty weight of the class material, students are expected to do much of the work on the web site at home.
Classes will be held in the computing lab of the Palmer School between 13:00 and 18:00. The instructor will be around in the lab from around 12:00 and stay on after 18:00 to answer questions and allow the students to work on their web sites under some supervision. In addition the instructor will be at CW Post campus on Tuesdays and Thurdays to see students individually as requested by students.
Students are encouraged to subscribe to the class mailing list. Visit \url{https://lists-1.liu.edu/mailman/listinfo/cwp-lis650-krichel} to to that.
Class details:

| | |
|---|---|
| 2004–09–12 | Prologue: web site assessment |
| 2004–10–03 | major HTML |
| 2004–10–10 | major CSS |
| 2004–10–17 | minor HTML |
| 2004–10–24 | minor CSS |
| 2004–10–31 | http and apache |

Slides for all classes are downloadable from the course web site.

**Readings**
As far as the design of web sites is concerned, Krug (2000) and Nielsen (2000) are classic references. Morville and Rosenfeld (2002) is a good book on information architecture. The most relevant contents of all three books will be discussed by the instructor.
The technical specifications of HTML and CSS are on the web. HTML 4.01 is defined in Raggett, Le Hors, and Jacobs (1999). CSS level 2 revision 1 is defined in Bos, Çelik, Hickson, and Lie (2004). http is defined in Fielding, Gettys, Mogul, Frystyk, Masinter, Leach, and Berners-Lee (1999). URLs are defined in Berners-Lee, Masinter, and McCahill (1994), but that definition was updated in Berners-Lee, Fielding, and Masinter (1998). MIME types are documented in IANA (2001). The documentation of apache is online at http://www.apache.org.
If students want a textbook on HTML and CSS, they are spoiled for choice. However, students should be aware that must books teach the loose version of HTML and place much less of an emphasis on stylesheets as the course contents does. This is a LIS-style course with an emphasis on separation of contents and presentation. Castro (2002) is a widely used and reasonably priced book for beginners. Werbach (2002) is a good online source. A book that the instructor likes a lot is Musciano and Bill (2002) . But it is expensive. An excellent book on CSS is Bos and Lie (2002) .

**Mailing list**
There is a mailing list for the course at https://lists-1.liu.edu/mailman/listinfo/cwp-lis650-krichel. All students are encouraged to subscribe. As a rule, answers to email sent to the instructor will be copied to the list. There are exceptions to this rule

- if the question writer requests the answer not to be posted
- if the question is a purely private matter

**Assessment**
Before each class except the first, there will be a quiz on the issued covered in the previous class. The average of all the quiz results will count for 5/12 of the assessment. The worst performance in a quiz is discounted. On the second class meeting, the students will hand in a one-page typed statement about the web site that they want to build. This statement should cover both the purpose of the web site and the site's architecture. The assessment of this statement will count for 1/12 of the grade.

On that second meeting, students will also hand in a web site assessment. This assessment should cover the web site of a LIS academic department in the US or abroad. The assessment should not aim to describe the web page, but assess its strength and weaknesses in terms of the usability criteria reviewed in the first class meeting. Each students should announce what web site they want to cover to the class email lists. The assessment should roughly be two typed pages long. If students don't like the first grade they get on the assessment they will be given a chance to improve it. The web site assessment will count for 2/12 of the course.
The remaining 4/12 will be assessed through the student's ability to build a web site. The site must validate against the *strict* version of the XHTML 1.0 specification. The site must have a style sheet with the main presentational elements. The site should provide an information source about a topic, though it need not to be comprehensive by any means. Students are recommended to develop the web site on behalf of someone else, just to get useful feedback on the site and to avoid creating something that is too designer-centered. The informational contents of the sit should go beyond simple link collections or path finders. Personal web sites, such as for the student describing themselves, are not allowed. The total amount of information contained should roughly be equivalent to a conventional student essay. It has to be finalized one week after the last class.

**Students**

Alene Paone[1]
Theresa Zahor[2]
John Sillari[3]
James Duffy[4]
Izumi Sakaguchi[5]
Eileen Heckel[6]
Brenda Praga[7]
Namiko Suga[8]
Tina Kiernan[9]
Jason Kaloudis[10]
Nicole Scherer[11]
Tammie Cohen[12]
lori abbatepaolo[13]
christine rolko[14]
Charles Fleming[15]
theresa a. rienzo[16]

## References


Berners-Lee, Tim, Roy T. Fielding, and Larry Masinter (1998). Uniform Resource Identifiers (URI): Generic Syntax. RFC 2396 available at http://www.ietf.org/rfc/rfc2396.txt.

Berners-Lee, Tim, Larry Masinter, and Mark McCahill (1994). Uniform Resource Locators (URL). RFC 1738 available at http://www.ietf.org/rfc/rfc1738.txt.

Bos, Bert, Taniek Çelik, Ian Hickson, and Håkon Wium Lie (2004). Cascading Style Sheets, level 2, revision 1. available at http://www.w3.org/TR/CSS21.

Bos, Bert and Håkon Wium Lie (2002). *Cascading Style Sheets: Designing for the Web* (2nd ed.). Addison Wesley.


[1] http://dlib.info/home/malvernehistory
[2] http://dlib.info/home/salesaudit
[3] http://dlib.info/home/lasdemo
[4] http://dlib.info/home/mysoftball
[5] http://dlib.info/home/jstudentny
[6] http://dlib.info/home/sailor
[7] http://dlib.info/home/mindbody
[8] http://dlib.info/home/shescrafty
[9] http://dlib.info/home/phoenixcomet
[10] http://dlib.info/home/thornium
[11] http://dlib.info/home/ksjerseys
[12] http://dlib.info/home/tcohen
[13] http://dlib.info/home/cozmopac
[14] http://dlib.info/home/crolko
[15] http://dlib.info/home/farrock
[16] http://dlib.info/home/procal

Castro, Elizabeth (2002). *HTML for the World Wide Web, Fifth Edition with XHTML and CSS: Visual QuickStart Guide*. Peachpit Press. described at http://www.cookwood.com/html/.

Fielding, Roy T., James Gettys, Jeffrey C. Mogul, Henrik F. Frystyk, Larry Masinter, Paul J. Leach, and Tim Berners-Lee (1999). Hypertext Transfer Protocol – HTTP/1.1. RFC 2616 available at http://www.ietf.org/rfc/rfc2616.pdf.

IANA (2001). Media Types. available at http://www.iana.org/assignments/media-types/.

Krug, Steve (2000). *DON'T MAKE ME THINK! A Common Sense Approach to Web Usability*. New Riders.

Morville, Robert and Louis Rosenfeld (2002). *Information Architecture for the World Wide Web*. O'Reilly. described at http://www.oreilly.com/catalog/infotecture2/.

Musciano, Chuck and Kennedy Bill (2002). *HTML and XHTML: The Definitive Guide, 5th Editon*. O'Reiley.

Nielsen, Jakob (2000). *Designing Web Usability: The practice of Simplicity*. New Riders.

Raggett, Dave, Arnaud Le Hors, and Ian Jacobs (1999). HTML 4.01 Specification. available at http://www.w3.org/TR/html4/.

Werbach, Kevin (2002). Bare Bones Guide to HTML. available at http://werbach.com/barebones/.