

School of Information Sciences - University of Pittsburgh

LIS 2600: Introduction to Information Technology [Current as of: 08/25/12]

Fall 2011

Class time: Mondays 12:00pm – 2:50pm

Location: 405 IS Building

Instructor:

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or by appointment

CourseWeb URL: http://courseweb.pitt.edu

I. Course Description:

Information technologies primer: computers and key applications; networking and Internet applications; implications of future technological developments on libraries; web page authoring; use of Internet and networks to deliver library services; graphics and multimedia applications.

II. CourseWeb Information:

CourseWeb is a Web-based system using BlackBoard software that facilitates course-related communication as well as distribution of course materials and grades. You can access CourseWeb at http://courseweb.pitt.edu . You must log in with your University Computer Account – this is the one that goes with your 'pitt.edu' e-mail address. If you do not have a Pitt account, please contact Computing Services (CSSD) at 412-624-HELP [4357] to find out how to get one. Course-related e-mail will be sent to your Pitt e-mail account. If you do not read e-mail on your Pitt account, you are

responsible for forwarding any e-mail received on your Pitt account to the e-mail address that you use. See http://accounts.pitt.edu/ for information on managing your Pitt account and forwarding e-mail. If you have trouble logging in to CourseWeb, you may need to log in to the accounts website above to activate your Pitt e-mail account. Call 412-624-HELP with any problems relating to your account.

III. Recommended books and Readings

There is no required textbook for this class, but there will be about 3-4 <u>required</u> readings each week. You will publish your reading notes online at your own blog space before the required deadline. The notes can be informal in style – even bulleted lists can be used when appropriate, however, the response should clearly indicate the context, including the part of the text that triggered your questions. Do not summarize the readings. Instead, discuss your thoughts, ideas, and questions related to them.

Readings will generally be available either on the Web or via CourseWeb. I will communicate each week which readings are required both in class and on CourseWeb. Additional readings may be added as needed. You may need a PDF reader, such as Adobe Reader, to view most readings.

IV. Related Software download and online accounts

a. Software to be downloaded and installed

- Adobe Reader for reading PDF files. http://www.adobe.com/products/acrobat/readstep2.html
- Firefox browser. http://www.mozilla.com/en-US/firefox/all.html#languages
- Jing the free version. Jing is an always-ready program that instantly captures and shares images and video ... from your computer to anywhere. http://www.jingproject.com/
- Lavasoft Ad-Aware the free version: http://lavasoft.com/products/ad_aware_free.php
- KompoZer. a complete web authoring system that combines web file management and easy-to-use WYSIWYG web page editing. http://kompozer.net/
- Skype. Skype created a little piece of software that makes communicating with people around the world easy and fun. http://about.skype.com/
- Zotero. [zoh-TAIR-oh] is a free, easy-to-use Firefox extension to help you collect, manage, and cite your research sources. It lives right where you do your work in the web browser itself. http://www.zotero.org/
- Microsoft package, particularly Microsoft Access.

b. Accounts that need to be created

- Blogger.com
- Citeulike.org
- Flickr.com
- Google account
- Koha
- Refworks
- Screencast.com

V. Course Schedule

Week	Date	Topic
1	Aug 27	Introduction and Course Overview
		Required Readings: 1) OCLC report: Information Format Trends: Content, Not Containers (2004). http://www.oclc.org/reports/2004format.htm 2) Clifford Lynch, "Information Literacy and Information Technology Literacy: New Components in the Curriculum for a Digital Culture" www.cni.org/staff/cliffpubs/info and IT literacy.pdf Lab Activities: Laptop Setup, Blogger Account, Locating Readings On/Off campus.
	Sep 3	Labor day, no class
2	Sep 10	Computer Basics, Digitization
		Required Readings: 1) Vaughan, J. (2005). Lied Library @ four years: technology never stands still. Library Hi Tech, 23(1), 34-49. At http://www.emeraldinsight.com/Insight/ViewContentServlet;jsessionid=C5 A0E976F56F442F9919082BF1F79360?Filename=Published/EmeraldFull TextArticle/Articles/2380230105.html 2) Doreen Carvajal. European libraries face problems in digitalizing. New York Times. October 28, 2007 http://www.nytimes.com/2007/10/28/technology/28iht_LIBRARY29.1.8079170.html 3) A Few Thoughts on the Google Books Library Project http://connect.educause.edu/Library/EDUCAUSE+Quarterly/AFewThoug htsontheGoogleBo/46023 Background Readings: 4) IFLA GUIDELINES FOR DIGITIZATION PROJECTS (2002) http://archive.ifla.org/VII/s19/pubs/digit-guide.pdf Discussion Topic: Digitization Digitization has been viewed as one of the important technology to move library service into current digital world. It is the digitization of rare books and making
		them available that first pops up in people's minds when people think of moving library services into more modern setting. However, digitization does not come without problems. Besides the papers in the required reading, the following articles also talk about digitization and the problems associate with it. • Scanners and Digitization: Stuart D. Lee. Digitization: Is It Worth It? http://www.infotoday.com/cilmag/may01/lee.htm • Why Digitize? Abby Smith Feburary 1999.

		 http://www.clir.org/pubs/reports/pub80-smith/pub80.html#preservation Guidelines for Digitization Projects for collections and holdings in the public domain http://www.ifla.org/en/publications/guidelines-for-digitization-projects-for-collections-and-holdings-in-the-public-domain Think of the following startup questions, and discuss in the discussion section. Digitization: Is It Worth It? Digitization is expensive, how to sustain it? Is working with private companies a good solution? Any problems that we need to be ware for this approach? "risk of a crushing domination by America in the definition of the idea that future generations will have of its world" Is this a valid concern? Any other issues pop up. Assignment 1 is out, and due on Sep 24 Digitization and Flickr
3	Sep 17	Multimedia Representation and Storage
		 Required Readings Data Compression. http://en.wikipedia.org/wiki/Data_compression Data compression basics (long documents, but covers all basics and beyond): http://dvd-hq.info/data_compression_1.php Edward A. Galloway, "Imaging Pittsburgh: Creating a shared gateway to digital image collections of the Pittsburgh region" First Monday 9:5 2004 http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/114_1/1061 Paula L. Webb, YouTube and libraries: It could be a beautiful relationship C&RL News, June 2007 Vol. 68, No. 6 http://www.ala.org/ala/mgrps/divs/acrl/publications/crlnews/2007/jun/yout_ube.cfm
		Lab Activities: Introduce Jing and pixlr
		Note: Bring a microphone (external or imbedded) for testing Jing in the Lab session.
		Download and install Jing from http://www.jingproject.com/ . After the installation, you need to register an account at screencast.com. There will be a popup window asking you to do that.
		You will work with the TAs to learn how to use Jing and create a very short video about how to access PittCat in your browser
4	Sep 24	Database Technologies and Applications

		Required Readings:
		1) Database. http://en.wikipedia.org/wiki/Database
		2) Entity relationship model in database: http://en.wikipedia.org/wiki/Entity-
		relationship_model
		3) database normalization process http://www.phlonx.com/resources/nf3/
		Lab Activities: Introduce Database System such as Microsoft Access
		Assignment 2 is out and due on Oct 9 (Tuesday)
_	0 . 1	MS Access.
5	Oct 1	Metadata and Content Management
		Required Readings:
		1) Anne J. Gilliland. Introduction to Metadata, pathways to Digital
		Information: 1: Setting the Stage
		http://www.getty.edu/research/conducting_research/standards/intrometadat
		a/setting.html
		2) Eric J. Miller. An Overview of the Dublin Core Data Model
		http://dublincore.org/1999/06/06-overview/
		3) Working with Endnote,
		http://www.hsl.unc.edu/Services/Tutorials/ENDNOTE/intro.htm
		Lab Activities: Introducing Zotero http://www.zotero.org/ and Refwork (ULS
		subscription to RefWorks
		http://www.library.pitt.edu/articles/database_info/refworks.html)
		Assignment 3 is out, due on Oct 22
		Building bibliographic collections using Zotero and RefWorks
6	Oct 9	Computer Networks, Wireless Networks
U	(note	Computer Networks, wheless Networks
	that this	Required Readings:
	is	1) Local Area Network: http://en.wikipedia.org/wiki/Local_Area_Network
	Tuesday	2) Computer network http://en.wikipedia.org/wiki/Computer_network
)	3) Coyle, K. (2005). Management of RFID in libraries. <i>Journal of Academic</i>
	,	<i>Librarianship</i> , 31(5), 486-489.
		Lab Activities: Check IP and MAC addresses on your computer, and learn FTP
		software FileZilla http://filezilla-project.org/
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7	Oct 15	Internet and WWW Technologies.
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		Required Readings: 1) Type Leff http://eemputer.heurstuffuerlie eem/internet
		1) Tyson, Jeff. http://computer.howstuffworks.com/internet-

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		infrastructure.htm/printable 2) Andrew K. Pace "Dismantling Integrated Library Systems" Library Journal, vol 129 Issue 2, p34-36. 2/1/2004 http://www.libraryjournal.com/article/CA374953.html 3) Sergey Brin and Larry Page: Inside the Google machine. http://www.ted.com/index.php/talks/sergey brin and larry page on google.html Lab Activities: Introducing Koha Assignment 4 is out, due on Oct 29 Koha ILS
8	Oct 22	HTML and Web Authoring Software
		Required Readings: 1) W3schools HTML Tutorial: http://www.w3schools.com/HTML/ 2) HTML Cheatsheet http://www.wired.com/images/multimedia/webmonkeycheatsheet_full.pdf 3) Pratter, F.E. (2011) Introduction to HTML, Chapter 2 of Web Development With SAS by Example, 3 rd Edition (Google Book)

		Assignment 5 is out, due on Nov 19
		HTML Authoring: My 2600 Page
10	Nov 5	XML
		Required Readings 1) Martin Bryan. Introducing the Extensible Markup Language (XML) http://burks.bton.ac.uk/burks/internet/web/xmlintro.htm 2) Uche Ogbuji. A survey of XML standards: Part 1. January 2004. http://www-128.ibm.com/developerworks/xml/library/x-stand1.html 3) Extending you Markup: a XML tutorial by Andre Bergholz http://www.computer.org/portal/web/csdl/abs/mags/ic/2000/04/w4074abs. htm 4) XML Schema Tutorial http://www.w3schools.com/Schema/default.asp Lab Activities: XML in metadata schemas
11	Nov 12	Digital Library, Institutional Repositories,
		Required Readings 1) Mischo, W. (July/August 2005). Digital Libraries: challenges and influential work. D-Lib Magazine. 11(7/8). http://www.dlib.org/dlib/july05/mischo/07mischo.html 2) Paepcke, A. et al. (July/August 2005). Dewey meets Turing: librarians, computer scientists and the digital libraries initiative. D-Lib Magazine. 11(7/8). http://www.dlib.org/dlib/july05/paepcke/07paepcke.html 3) Lynch, Clifford A. "Institutional Repositories: Essential Infrastructure for Scholarship in the Digital Age" ARL, no. 226 (February 2003): 1-7. http://www.arl.org/bm~doc/br226ir.pdf Lab Activities: DScholoar and Drupal system Assignment 6 is out, due on Dec 3 Drupal
12	Nov 19	Web Search and OAI Protocol
		Required Readings 1) David Hawking, Web Search Engines: Part 1 and Part 2 IEEE Computer, June 2006. http://www.computer.org/portal/web/csdl/doi/10.1109/MC.2006.213 and http://www.computer.org/portal/web/csdl/doi/10.1109/MC.2006.286 2) Shreeves, S. L., Habing, T. O., Hagedorn, K., & Young, J. A. (2005). Current developments and future trends for the OAI protocol for metadata harvesting. <i>Library Trends</i> , <i>53</i> (4), 576-589. 3) MICHAEL K. BERGMAN, "The Deep Web: Surfacing Hidden Value" http://quod.lib.umich.edu/cgi/t/text/text-

		idx?c=jep;view=text;rgn=main;idno=3336451.0007.104
		Lab Activities: Advance Searches in Google Scholar and Web of Science
13	Nov 26	Social Software and Library 2.0
		 Required Readings: John Blossom (2009). What makes social media tick: seven secrets of social media. Content Nation, chapter 2. Wiley Publishing Inc. http://www.contentnation.com/wiki/chapter-2-what-makes-social-media-tick-seven-secrets-of-social-media Charles Allan, "Using a wiki to manage a library instruction program: Sharing knowledge to better serve patrons, C&RL News, April 2007 Vol. 68, No. 4
14	Dec 3	IT Issues: Security and Privacy
		Required Readings: 1) No place to hide site: http://www.noplacetohide.net/ 2) TIA and data mining http://www.epic.org/privacy/profiling/tia/ 3) MyTurn: Protecting privacy rights in libraries, By Judah Hamer • September 24, 2008 http://greatlibrarynews.blogspot.com/2008/09/myturn-protecting-privacy-rights-in.html
		 Discussion Topic: Online Privacy Jeffrey Rosen - Is Privacy Dead? http://www.youtube.com/watch?v=5raH8oORHKM FACEBOOK: Federal Human Data Mining Program http://www.youtube.com/watch?v=OwnTWZ1-UWY Jonathan Zittrain - The Future of the Internet http://www.youtube.com/watch?v=o7UlYTFKFqY#
15	Dec 10	Organizational Computing, Cloud Computing, and the Future

Required Readings:

- 1) Galen Gruman. "What cloud computing really means" InfoWorld, April 2008. http://www.infoworld.com/article/08/04/07/15FE-cloud-computing-reality_1.html
- 2) Explaining Cloud Computing http://www.youtube.com/watch?v=hplXnFUlPmg&NR=1
- 3) Thomas Frey. The Future of Libraries: Beginning the Great Transformation http://www.davinciinstitute.com/page.php?ID=120

VI. Assessment

Participation 40%

The participation in this course is assessed by students' activities. The graded activities include:

- Each week before the class starts, the students need to submit their notes on required readings for that week. The notes should be posted in the students' blog space (how to open a blog is discussed in class 1). The deadline for posting the reading notes is Monday evening of that week. Each reading note will count 2% in the final score. Maximum 10 reading notes will be counted.
- After each week's class, students will have a chance to raise one muddiest point, which is the
 most vague or unclear topic discussed in that week's class that students want to have more
 input from either peer students or the instructor. The deadline for posting the muddiest is
 Monday evening of the following week. Each comment/answer contributes 1.5% to the final
 score. Maximum 10 will be counted.
- There will be 5% for class participation.

Assignment 60%

There are total six assignments, each of which will count 10% in the final course score. You are required to make a clear presentation about your ideas, and the essay should be about one or two pages.

The deadline of submitting each assignment is before 12pm of the due date. Each 24 hours delay will have 40% deduction of the maximal score. No submission later than 2 days will be accepted except in the case of emergencies and personal disasters.

Course Grading Scale:

The final grade depends on the percentage of points you have earned, and the definition of letter grades is:

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$$90 \le A \le 93, 93 \le A \le 100$$

- $80 \le B \le 83, 83 \le B \le 87, 87 \le B \le 90$
- $70 \le C < 73,73 < C \le 77,77 < C < 80$
- $60 \le D < 70$,
- F < 60

VII. Course Policies

Plagiarism

It is expected that the work you submit in this course will be your own. While collaboration is allowed for the course project, it should be approved in advance and the nature of each contribution should be specified in the project proposal and the final submission.

The following statement is taken from *The Teaching Assistant Experience: A Handbook for Teaching Assistants and Teaching Fellows at the University of Pittsburgh* (A.P. Haley and J.M. Nicoll, eds.)]

Plagiarism means submitting work as your own that is someone else's. For example, copying material from a book or other source without acknowledging that the works or ideas are someone else's and not your own is plagiarism. If you copy an author's words exactly, treat the passage as a direct quotation and supply the appropriate citation. If you use someone else's ideas, even if you paraphrase the wording, appropriate credit should be given. You have committed plagiarism if you purchase a term paper or submit a paper as your own that you did not write¹.

Plagiarism is a violation of the University of Pittsburgh's standards on academic honesty, and violations of this policy are taken seriously. From the *Guidelines on Academic Integrity:* Student and Faculty Obligations and Hearing Procedures (effective September, 1995):

A student has an obligation to exhibit honesty, and to respect the ethical standards of the historical profession in carrying out his or her academic assignments. Without limiting the application of this principle, a student may be found to have violated this obligation if he or she:

- Presents as one's own, for academic evaluation, the ideas, representations, or words of another person or persons without customary and proper acknowledgment of sources.
- Submits the work of another person in a manner which represents the work to be one's own. [Quotation ellipsed.] ²

Special Needs

Students with disabilities who require special accommodations or other classroom modifications should notify the instructor and the University's Office of Disability Resources & Services (DRS) no

 $^{^{1}\,}$ B. G. Davis, Tools for Teaching (San Francisco: Jossey-Bass, 1993), 300.

² University of Pittsburgh, *Guidelines on Academic Integrity: Student and Faculty Obligations and Hearing Procedures* (Pittsburgh: University of Pittsburgh, 1995), 7-8.

later than the 2nd week of the term. Students may be asked to provide documentation of their disability to determine the appropriateness of the request. DRS is located in 216 William Pitt Union and can be contacted at 648-7890 (Voice), 624-3346(Fax), and 383-7355(TTY). Students who must miss an exam or class due to religious observances must notify the instructor ahead of time and make alternative arrangements.