

LIS 663: Basic Database Searching | Fall 2011

Thursdays 9-11:40a, HL 2K | CRN 72190

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The goal of this course is for students to gain a functional understanding of information retrieval systems, how they are implemented in a diverse array of Web and professional online databases, and how to search and use them effectively in research and reference work. Prerequisite: LIS 601, Introduction to Reference and Information Services.

LIS Student Learning Outcomes

- 1) Understand, apply and articulate the history, philosophy, principles and ethics of library and information science and the related professions
 - 1a) Apply LIS theory and principles to diverse information contexts
 - 1c) Develop and apply critical thinking skills in preparation for professional practice
- 2) Develop, administrate, assess and advocate for information services by exercising principled communication, teamwork and leadership skills
 - 2b) Work effectively in teams
- 3) Organize, create, archive, preserve, retrieve, manage, evaluate and disseminate information resources in a variety of formats
 - 3a) Demonstrate understanding of the processes by which information is created, evaluated and disseminated
 - 3c) Search, retrieve and synthesize information from a variety of systems and sources
- 4) Evaluate and use the latest information technologies, research findings and methods
 - 4a) Evaluate systems and technologies in terms of quality, functionality, cost-effectiveness and adherence to professional standards
 - 4b) Integrate emerging technologies into professional practice
 - 4c) Apply current research findings to professional practice

Course Learning Objectives

- Learn to search professional online databases and the Web efficiently and effectively, emphasizing their use as part of reference service in libraries and information centers;
- Become acquainted with the characteristics of bibliographic and non-bibliographic databases from a professional searcher's point of view;
- Learn the basics of searching the most widely used professional online information systems in college, public and school libraries;
- Understand the role and functions of the search intermediary and search instructor;
- Raise awareness of the deficiencies in professional online information systems.

Professional expectations

All students in the Program are expected to become familiar with and adhere to the Professional Expectations, at <http://www.hawaii.edu/lis/students.php?page=profexp>

Teaching method

This course is conducted as a lecture/discussion, with assignments and other exercises to impart and reinforce practices of effective online searching. You will be required to spend an extraordinary amount of time working on your own and in groups, and familiarizing yourself with a wide variety of databases to put concepts from lectures and readings into practice. Discussions allow more in-depth exploration of readings and live systems, and allow you to contribute to the direction of the course. All readings are online, available through the Resources section of the Lailima course website (<http://lailima.hawaii.edu/>).

Research methods

Research methods employed in this course include action research, case studies, experiments, heuristic evaluation and information retrieval.

Assignments

Assignments are based on lectures, discussions, readings, and the expectation that students will work independently to gain a professional level of database searching expertise, beyond what assignments require. You must complete all assignments in order to pass the course. General guidelines and requirements for all assignments:

- Use the databases intensively and critically. Expect frustration. Persevere.
- Consult database help files, readings and lecture slides, early and often.
- Don't procrastinate. Late assignments will be penalized 3 points, plus an additional 3 points for each 24-hour period after the due date. You will also be asked to leave during the class discussion of the assignment results, which will impact the participation component of your grade.
- Don't free-ride. Team underperformers will be identified in individual assessment papers, and their grade adjusted accordingly.
- Don't plagiarize. Plagiarism may result in dismissal from the LIS Program.

Assignments 1 and 2 (15 points each) will be database searching exercises done in groups. Specific instructions will be distributed with each assignment, but you will be expected to work on your own, then reach consensus with your group on the best solutions, and submit one joint paper per group. Keep a digital diary of your search steps, rationale and results, and back up your files. Be prepared to demonstrate your results in class.

Live reference session (10 points): By Week 6, you will declare an area of expertise, a topic that is covered substantially (roughly 1000 records or more) in one database of your choice available through Hamilton Library. You will be presented with a reference question in your topic area and database for you to address live in class during Week 10. Your grade will be based on how well you demonstrate your understanding of the database and search strategies covered in class, not whether you arrive at a particular answer.

Midterm (20 points): The midterm will be done individually, and will include search exercises, short-answer questions and an evaluative/analytical component.

Final project (25 points): For the final project, you will design a professional database focused on a specific topic, which may or may not be the same as the one you chose for the live reference session. You will apply concepts from the readings, existing databases and your own search experiences to propose specific details about the audience, content, vocabulary, interface, functionality and ongoing management and evaluation of a professional information resource. In your final project you will be expected to demonstrate mastery of **all** of the applicable LIS Student Learning Outcomes listed on the first page of this syllabus. More details will be discussed in class.

Reflective assessment (5 points): In roughly 5 pages, analyze and evaluate your experience with Assignments 1 and 2. Discuss what you felt were the most valuable lessons you learned in each assignment, and assess how well your group worked as a team, based specifically on the in-class team exercise. Your reflective assessment should have an informal tone, but should explicitly reference at least two concepts from readings or lectures that you found particularly useful and/or applicable to your search assignments.

Exercises and participation (10 points): Full marks will be given to students who attend all sessions, show that they have read and understood the week's readings, participate actively and knowledgeably, and contribute to an environment where everyone is encouraged to participate. Several in-class exercises will be given throughout the semester; though these will not be graded individually, failing to complete them in a professional manner will lower your grade.

98-100 A+ | 93-97 A | 90-92 A- | 88-89 B+ | 83-87 B | 80-82 B- | 78-79 C+ | 73-77 C

Schedule (subject to change)

Date	Topic / Assignments	Readings (try to read in order listed)
Week 1 8/25	Introduction and core concepts	Wells (1937) Swanson (1988) Perkins (2001) Tennant (2001) Miller (2005)
Week 2 9/1	Search strategies and tactics	Jacsó (1999) Bates (1989) Quint (parts 1-2) (1991) Ojala (2003) Booth (2008)
Week 3 9/8	Searching behavior	Badke (2010) Xie & Wolfram (2009) Novotny (2004) Haglund & Olsson (2008) Du & Evans (2011)
Week 4 9/15	Database content DUE: Assignment 1 (9/14, 6pm)	Lawlor (2006) Chen (2010) Affelt (2010)
Week 5 9/22	Vocabulary	Furnas et al. (1997) Belkin (2000) Bates (1998) Shultz (2006) Affelt (2011)
Week 6 9/29	Web search models	Tann & Sanderson (2009) Choo et al. (2000) Jansen et al. (2009) Spencer (2011)
Week 7 10/6	Advanced search operations and mobile searching DUE: Assignment 2 (10/5, 6pm)	Jacsó (2004b) Murphy (2010)
Week 8 10/13	ASIST Conference—no class meeting	
Week 9 10/20	Web content and search engine optimization	Google + SEO readings (2011) Roth (2009) Collins (2010) Notess (2011, 2009)
Week 10 10/27	DUE: Live reference session	
Week 11 11/3	Citation-based searching	Garfield (1955) Jacsó (2004a, 2005a, 2011) Braun et al. (2010)
Week 12 11/10	Midterm review DUE: Midterm (11/9, 6pm)	
Week 13 11/17	Evaluating and presenting search results	Harter (1992) Jacsó (2005b, parts 1-2) Kangiser (2011)
Week 14 11/24	Thanksgiving—no class meeting	
Week 15 12/1	Hybrid models	Tenopir (2008) Cromity (2009) Korah & Cassidy (2010) Stern (2009) Gazan (2008)
Week 16 12/8	Final project presentations DUE: Final project writeup (12/7, 11:59pm) DUE: Reflective assessment (12/11, 11:59pm)	

Readings

- Affelt, Amy (2010). Paving Paradise: Database Content Removal and Information Professionals. *Online* 34(1), 14-16.
- Affelt, Amy (2011). Changing Semantics and Information Professionals. *Online* 35(3), 34-37.
- Badke, William (2010). How Stupid is Google Making Us? *Online* 34(6), 51-53.
- Bates, Marcia J. (1989). The Design of Browsing and Berrypicking Techniques for the Online Search Interface. *Online Review* (13), 407-424.
<http://www.gseis.ucla.edu/faculty/bates/berrypicking.html>
- Bates, Marcia J. (1998). Indexing and Access for Digital Libraries and the Internet: Human, Database, and Domain Factors. *Journal of the American Society for Information Science* 49(13), 1185-1205. <http://www.gseis.ucla.edu/faculty/bates/articles/indexdlib.html>
- Belkin, Nicholas J. (2000). Helping People Find What They Don't Know. *Communications of the ACM*. 43(8), 58-61.
- Booth, Andrew (2008). Using Evidence in Practice: Unpacking Your Literature Search Toolbox: On Search Styles and Tactics. *Health Information and Libraries Journal* 25, 313-317.
- Braun, Tibor, Wolfgang Glänzel and András Schubert (2010). On Sleeping Beauties, Princes and Other Tales of Citation Distributions... *Research Evaluation* 19(3), 195-202.
- Chen, Xiaotian (2010). The Declining Value of Subscription-based Abstracting and Indexing Services in the New Knowledge Dissemination Era. *Serials Review* 36(2), 79-85.
- Choo, C.W., B. Detlor, and D. Turnbull (2000). Information Seeking on the Web: An Integrated Model of Browsing and Searching. *First Monday* 5(2).
<http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/729/638>
- Collins, Jessanne (2010). My Summer on the Content Farm. *The Awl* (4 Nov 2010)
<http://www.theawl.com/2010/11/my-summer-on-the-content-farm>
- Cromity, Jamal (2009). Value Continuum and Professional Online Search Services: The Collaborative Stage. *Online* Jul/Aug 2009, 38-40.
- Du, Jia Tina, and Nina Evans (2011). Academic Users' Information Searching on Research Topics: Characteristics of Research Tasks and Search Strategies. *Journal of Academic Librarianship* 37(4), 299-306.
- Furnas, G.W., T.K. Landauer, L.M. Gomez, and S.T. Dumais (1987). The Vocabulary Problem in Human-System Communication. *Communications of the ACM* 30(11), 964-971.
- Garfield, Eugene (1955). Citation Indexes for Science. *Science, New Series* 122(3159), 108-111.
- Gazan, Rich (2008). Social Annotations in Digital Library Collections. *D-Lib* 14(11/12).
<http://www.dlib.org/dlib/november08/gazan/11gazan.html>
- Google + SEO readings (2011).
- Dodging Google Sheriff
<http://www.theage.com.au/news/web/dodging-google-sheriff/2007/08/20/1187462175390.html?page=fullpage>
- SEOMoz search engine ranking factors
<http://www.seomoz.org/article/search-ranking-factors>

Google AdWords info and tutorials

<http://www.google.com/onlinechallenge/adwords.html>

Haglund, Lotta and Per Olsson (2008). The Impact on University Libraries of Changes in Information Behavior Among Academic Researchers: A Multiple Case Study. *The Journal of Academic Librarianship*, 34(1) 2008: 52-59.

Harter, Stephen P. (1992). Psychological Relevance and Information Science. *Journal of the American Society for Information Science* 43(9), 602-615.

Jacsó, Péter (1999). Savvy Searching Starts with Browsing. *Online & CD-ROM Review* 23(3), 169-172.

Jacsó, Péter (2004a). Citation-Enhanced Indexing/Abstracting Databases. *Online Information Review* 28(3), 235-238.

Jacsó, Péter (2004b). Query Refinement by Word Proximity and Position. *Online Information Review* 28(2), 158-161.

Jacsó, Péter (2005a). As We May Search – Comparison of Major Features of the Web of Science, Scopus and Google Scholar Citation-Based and Citation-Enhanced Databases. *Current Science* 89(9), 1537-1547.

Jacsó, Péter (2005b). Options for Presenting Search Results
Part 1: *Online Information Review* 29(3) 311-319.
Part 2: *Online Information Review* 29(4), 412-418.

Jacsó, Péter (2011). Google Scholar Duped and Deduped: The Aura of "Robometrics." *Online Information Review* 35(1), 154-160.

Jansen, Bernard J., Mimi Zhang and Carsten D. Schultz (2009). Brand and its Effect on User Perception of Search Engine Performance. *Journal of the American Society for Information Science & Technology* 60(8), 1572-1595.

Kangiser, Angela (2011). What 'Value-Added Deliverables' Means Today. *Online* 35(1), 20-24.

Korah, Abe, and Erin Dorris Cassidy (2010). Students and Federated Searching: A Survey of Use and Satisfaction. *Reference and User Services Quarterly* 49(4), 325-332.

Lawlor, Bonnie (2003). Abstracting and Information Services: Managing the Flow of Scholarly Communication—Past, Present, and Future. *Serials Review* 29(3), 200-209.

Miller, Todd (2005). In Defense of Stupid Users. *Library Journal* 15 March 2005.
<http://www.libraryjournal.com/article/CA509607.html>

Murphy, Joe (2010). Using Mobile Devices for Research: Smartphones, Databases and Libraries. *Online* 34(3), 14-18.

Notess, Greg R. (2009). Forget Not the Forums. *Online* 33(2), 41-43.

Notess, Greg R. (2011). Content Farming, Quick Creation and Declining Information Quality. *Online* 35(3), 46-48.

Novotny, E. (2004). I Don't Think, I Click: A Protocol Analysis Study of Use of a Library Online Catalog in the Internet Age. *College & Research Libraries* 65(6), 525-37.

Ojala, Marydee (2003). When Bad Searches Happen to Good Searchers. *Online*, 27(1), 58-60.

Perkins, Eva (2001). Johns Hopkins Tragedy: Could Librarians Have Prevented a Death? *Information Today*. <http://newsbreaks.infotoday.com/nbreader.asp?ArticleID=17534>

- Quint, Barbara (1991). Inside a Searcher's Mind: The Seven Stages of an Online Search. Part 1: Online 15(3), 13-18; Part 2: Online 15(4), 28-35.
- Roth, Daniel (2009). The Answer Factory: Demand Media and the Fast, Disposable and Profitable as Hell Media Model. Wired 17.11.
http://www.wired.com/magazine/2009/10/ff_demandmedia/all/1
- Shultz, Mary (2006). Mapping of Medical Acronyms and Initialisms to Medical Subject Headings (MeSH) across Selected Systems. Journal of the Medical Library Association 94(4), 410-414.
- Spencer, Brett (2011). Lesson Plans for Google Search Specificity. Online 35(3), 29-33.
- Stern, David (2009). Harvesting: Power and Opportunities Beyond Federated Search. Online Jul/Aug, 35-37.
- Swanson, Don (1988). Historical Note: Information Retrieval and the Future of an Illusion. Journal of the American Society for Information Science 39(2), 91-97.
- Tann, Chadwyn and Mark Sanderson (2009). Are Web-Based Informational Queries Changing? Journal of the American Society for Information Science & Technology 60(6), 1290-1293.
- Tennant, Roy (2001). Digital Libraries - The Convenience Catastrophe. Library Journal 15 December 2001. <http://www.libraryjournal.com/article/CA185367.html>
- Tenopir, Carol (2008). Online Databases - The Past Catches Up. Library Journal, 15 July 2008. <http://www.libraryjournal.com/article/CA6573363.html>
- Wells, H.G. (1937). The Idea of a Permanent World Encyclopedia. Encyclopedie Francaise. https://sherlock.ischool.berkeley.edu/wells/world_brain.html
- Xie, Iris and Dietmar Wolfram (2009). A Longitudinal Study of Database Usage Within a General Audience Digital Library. Journal of Digital Information 10(4).
<http://journals.tdl.org/jodi/article/view/304/505>