

## **LIS 663: Basic Database Searching | Summer 2013**

MWF 9-11:40a, HL 2K | CRN 4093

Rich Gazan | [gazan@hawaii.edu](mailto:gazan@hawaii.edu) | office: HL 2H (office hours by appointment)

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. Readings and lectures are complementary: they will not overlap completely. 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 Laulima course website (<http://laulima.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.
- Show your work. Keep screenshots of your search steps and results. Be prepared to demonstrate your results in class.
- 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.

**Live reference session (10 points):** By Session 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. 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 include search exercises, short-answer questions and an evaluative/analytical component to be answered individually.

**Final project (20 points):** The final day of the course will consist of final project presentations. You will have several options for the final project. 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. 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 (15 points):** Exercises and informal class discussions are your chance to contribute to the direction of the class, ask questions and share your experiences. Full marks will be given to students who attend every class meeting, participate actively and knowledgeably, initiate discussions and contribute to existing discussions, and contribute to an environment where all students are encouraged to participate. We will occasionally do in-class exercises where you may be asked to work individually or in small groups and report your findings. While these will not be graded individually, failing to complete them will reduce the participation component of 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)

<b>Date</b>	<b>Topic / Assignments</b>	<b>Readings</b> (try to read in order listed)
<b>Session 1</b> 7/8	<b>Introduction and core concepts</b>	Wells (1937) Swanson (1988) Perkins (2001)
<b>Session 2</b> 7/10	<b>Search strategies and tactics</b> <i>Assignment 1 handed out</i>	Bates (1989) Jacsó (1999) Booth (2008)
<b>Session 3</b> 7/12	<b>Searching behavior</b>	Xie & Wolfram (2009) Haglund & Olsson (2008) Du & Evans (2011)
<b>Session 4</b> 7/15	<b>Database content</b>  DUE: <i>Assignment 1</i> (before class begins)	Lawlor (2006) Wieland et al. (2012) Chen (2010) Affelt (2010)
<b>Session 5</b> 7/17	<b>Vocabulary</b>  <i>Assignment 2 handed out</i>	Furnas et al. (1997) Belkin (2000) Shultz (2006) Affelt (2011)
<b>Session 6</b> 7/19	<b>Web search models</b>  DUE: <i>Live reference session topic and database</i>	Google (2010, 2011) Tann & Sanderson (2009) Jansen et al. (2009) Spencer (2011)
<b>Session 7</b> 7/22	<b>Advanced search operations and mobile searching</b>  DUE: <i>Assignment 2</i> (before class begins)	Jacsó (2004) Murphy (2010)
<b>Session 8</b> 7/24	<b>Web content and search engine optimization</b>	SEO readings (2011) Roth (2009) Collins (2010) Notess (2011, 2009)
<b>Session 9</b> 7/26	<b>Live reference session</b>	
<b>Session 10</b> 7/29	<b>Citation-based searching</b>	Jacsó (2005) +TBD Garfield (1955) (recommended) Braun et al. (2010) (recommended)
<b>Session 11</b> 7/31	<b>Searchability vs. findability</b>  <i>Midterm handed out</i>	Jacsó (1993a, 1993b) +TBD
<b>Session 12</b> 8/2	<b>Take-home midterm; no class meeting</b>	
<b>Session 13</b> 8/5	<b>Midterm review and final project discussion</b>  DUE: <i>Midterm</i> (before class begins)	
<b>Session 14</b> 8/7	<b>Discovery tools</b>  <i>Guest speaker: Ginny Tanji, Director, John A. Burns School of Medicine Health Sciences Library</i>	Stern (2009) Korah & Cassidy (2010) Stern (2013) +TBD
<b>Session 15</b> 8/9	<b>Altmetrics and hybrid search models</b>	Harter (1992) Kangiser (2011) Priem et al. (2012) Gazan (2008) (recommended) Jacsó (2011) (recommended)
<b>Session 16</b> 8/12	<b>Final project presentations</b>  DUE: <i>Reflective assessment</i> (8/15, 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.
- 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>
- 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.
- 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>
- 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 (2010). How Search Works. <http://www.youtube.com/watch?v=BNHR6IQJGZs>
- Google (2011). How Google Makes Improvements to its Search Algorithm  
<http://www.youtube.com/watch?v=J5RZOU6vK4Q>
- 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 (1993a). Searching for Skeletons in the Database Cupboard - Part I: Errors of Omission. *Database* 16(1) February, 1993, p. 38-49.  
<http://www.jacso.info/PDFs/jacso-searching-for-skeletons-1.pdf>
- Jacsó, Péter (1993b). Searching for Skeletons in the Database Cupboard - Part II: Errors of Commission. *Database* 16(2) April, 1993, p. 30, 32-36.  
<http://www.jacso.info/PDFs/jacso-searching-for-skeletons-2.pdf>

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

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

Jacsó, Péter (2005). 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), 1537-47.

<http://www.jacso.info/PDFs/jacso-as-we-may-wos-scopus-gs.pdf>

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

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

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SEO readings (2011).

Dodging Google Sheriff

<http://www.theage.com.au/news/web/dodging-google-sheriff/2007/08/20/1187462175390.html?page=fullpage>

MOZ search engine ranking factors

<http://moz.com/article/search-ranking-factors>

Google AdWords info and tutorials

<https://adwords.google.com/select/KeywordToolExternal?defaultView=3>

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