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](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 Laulima course website ([http://laulima.hawaii.edu/](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.
- 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)

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic / Assignments</th>
<th>Readings (try to read in order listed)</th>
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| 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) 
                      |  | 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  | Lawlor (2006) 
                      |  | Chen (2010) 
                      |  | Afffelt (2010) |
| Week 5 9/22 | Vocabulary | Furnas et al. (1997) 
                      |  | Belkin (2000) 
                      |  | Bates (1998) 
                      |  | Shultz (2006) 
                      |  | Afffelt (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  | 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) |

**DUE** indicates that the assignment is due on the specified date.
Readings


Google + SEO readings (2011).


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


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.


