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 Program Learning Objectives

- Demonstrate theoretical understanding of and basic competencies in evaluating, selecting and organizing information sources. (#5)
- Demonstrate theoretical understanding of and basic competencies in retrieval, dissemination, utilization and evaluation of information sources. (#6)
- Apply basic competencies and knowledge that are essential for providing, managing, and designing information services in a variety of information environments. (#3)
- Demonstrate basic competency in the latest specialized information technologies. (#11)
- Demonstrate an understanding of the above goals within the perspective of prevailing technologies. (#12)

Course Learning Objectives

- Learn to search online databases efficiently and effectively, emphasizing their use as part of reference service in libraries and information/media 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 the expensive professional online information systems.

ALA Core Competencies addressed:

- Knowledge Organization: standards to control and create information structures, principles involved in the organization and representation of knowledge and information structures. (#3)
- Technological Knowledge: current information and communication technologies as they affect information centers, concepts and processes related to assessing and evaluating impact and efficacy of tech-based products and services, use of Information and Communication Technology (ICT) and tools; (#4)
- Knowledge Dissemination—Service: concepts, principles and techniques that facilitate information access for users, interaction with users to provide consultation or guidance in use of information resources, assessment of user needs, diversity in user need. (#5)
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 will be conducted in a lecture/discussion format, with regular exercises inside and outside of class to impart and reinforce key concepts and practices of effective online information retrieval. In this course, you will be required to spend an extraordinary amount of time working on your own and in groups, 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 students to contribute to the direction of the course. Assignments and exercises provide the opportunity for students to develop and demonstrate a professional level of database searching expertise. 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 and grading

Assignments 1 and 2 will be online searching exercises done in groups; submit one joint paper per group by midnight before the due date. Assignments are based on lectures, discussions, readings, and the expectation that students will work independently to gain understanding, well beyond what assignments require. General guidelines and requirements:

- Use the databases intensively and critically.
- Consult database Help files, readings and lecture slides, early and often.
- Expect frustration. Persevere.
- Work on your own, then reach consensus with your group on the best solutions.
- Keep a digital diary of your search steps, rationale and results. Screenshots are mandatory. Be prepared to demonstrate and discuss your results in class.
- Submit assignments digitally, to gazan@hawaii.edu. Back up your files.
- Don't procrastinate. Late assignments will be penalized 5 points for each 24 hour period after the deadline, and you may be asked to leave class during discussion.
- 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.

The midterm, final and individual assessment will be done individually. The midterm will be a collection of challenging search exercises distributed in Week 10 and due Week 12. For the final, you will declare an area of topic expertise in Week 6, and will be presented with a reference question in your topic area for you to solve live in class on Week 16. You will then have three days to write up a brief analysis of your experience. The individual assessment is a brief reflective report of your group experience in Assignments 1 and 2. More detail on all the assignments will be provided in class. There will also be occasional in-class exercises that will not be graded individually, but will form part of your participation grade.

- Assignments 1 and 2: 15 points each
- Midterm: 25 points
- Final project: 30 points (20 presentation + 10 writeup)
- Individual assessment: 5 points
- Exercises and participation: 10 points

99-100 A+ | 93-98 A | 90-92 A- | 88-89 B+ | 83-87 B | 80-82 B- | 78-79 C+ | 73-77 C
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic / Assignments</th>
<th>Readings (try to read these in the order listed)</th>
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</thead>
<tbody>
<tr>
<td>Week 1 8/27</td>
<td>Introduction and core concepts</td>
<td>Wells, Bush, Swanson, Belkin, Tennant, Storey</td>
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<tr>
<td>Week 2 9/3</td>
<td>Search flow: interactions and interfaces</td>
<td>Saracevic, Xie, Novotny, Haglund</td>
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<td>Week 3 9/10</td>
<td>Search flow: strategies and tactics</td>
<td>Jacsó (1999), Bates (1989), Morton, Proctor</td>
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<td>Week 4 9/17</td>
<td>Abstracting and indexing services</td>
<td>Lawlor, Regazzi, De Guire</td>
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<td><strong>DUE: Assignment 1 (9/16, 11:59pm)</strong></td>
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<tr>
<td>Week 5 9/24</td>
<td>Controlled vocabulary</td>
<td>Furnas, Bates (1998), Shiri, Jacsó (2003, parts 1-3), Gault</td>
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<td>Week 6 10/1</td>
<td>Web search models and natural language searching</td>
<td>Falagas, Jansen (1998), Choo, Jacsó (2005e), Zhou</td>
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<td><strong>DUE: Final project proposal (9/30, 11:59pm)</strong></td>
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<tr>
<td>Week 7 10/8</td>
<td>Search engine optimization</td>
<td>Google + SEO readings, Jansen (2008)</td>
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<td>Week 8 10/15</td>
<td>Advanced search operations and query refinement</td>
<td>Jacsó (2004b, 2005d), Othman</td>
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<td><strong>DUE: Assignment 2 (10/14, 11:59pm)</strong></td>
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<tr>
<td>Week 9 10/22</td>
<td>Citation-based searching</td>
<td>Garfield, Tenopir (2001), Jacsó (2004a, 2005a, 2007a-c, 2008)</td>
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<td>Week 10 10/29</td>
<td>Midterm</td>
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<td>Week 11 11/5</td>
<td>ASIST conference—no class meeting</td>
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<td>Week 12 11/12</td>
<td>Enhancing and evaluating search results</td>
<td>Harter, Quint (parts 1-2), Ojala, Jacsó (2005c, parts 1-2)</td>
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<td><strong>DUE: Midterm (11/11, 11:59pm)</strong></td>
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<tr>
<td>Week 13 11/19</td>
<td>Database selection and resource discovery</td>
<td>Tenopir (2002), Meier</td>
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<td>Week 14 11/26</td>
<td>Hybrid models</td>
<td>Tenopir (2008), Gazan</td>
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<td>Week 15 12/3</td>
<td>Project work day</td>
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<td>Week 16 12/10</td>
<td><strong>DUE: Final project presentation (12/10)</strong></td>
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<td></td>
<td><strong>Final project writeup + Individual assessment (12/13, 11:59pm)</strong></td>
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Readings


Google + SEO readings (2009).


SEOmoz site 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.


Jacsó, Péter (2005c). Options for Presenting Search Results


