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.

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

Assignments 1 and 2 (15 points each) will be online searching exercises done in groups; submit one joint paper per group by midnight before the class session, to gazan@hawaii.edu. 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. Expect frustration. Persevere.
- Consult database Help files, readings and lecture slides, early and often.
- 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. Back up your files. Be prepared to demonstrate your results in class.
- 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.

Live reference session (10 points): By Week 6, you and a partner will declare an area of expertise, and three databases available through Hamilton Library in which your topic is covered substantially (roughly 1000 records or more). You will be presented with a reference question in your topic area for you to address, using some or all three databases, live in class during Week 10.

Midterm (20 points): The midterm will be a collection of challenging search exercises distributed in Week 10 and due Week 12.

Final project (25 points): You have two options for a final project:

1. A 15-page paper, where you conduct a professional, critical analysis of your topic and include 8-12 insightful references to course content with a formal bibliography. Some possible final project ideas:
   - Compare/contrast/evaluate 2-3 databases for a given query
   - Find the ‘best 30’ records for a given query in a given database
   - Propose a redesign of a given database
   - Suggest an entirely new database focused on a particular topic area

2. Participate in the Google Online Marketing Challenge (GOMC), and submit a formal writeup. More details about the GOMC will be discussed in class.

Reflective assessment (5 points): In roughly 5 pages, analyze and evaluate your experience in (1) your group work in Assignments 1 and 2, (2) the live reference session, and (3) the final project. Discuss what you learned in each assignment and the positives and negatives of how your group(s) worked together. The reflective assessment should have an informal tone, but should explicitly reference two or three concepts from readings or lectures you found particularly useful and/or applicable.

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.

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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<tbody>
<tr>
<td>Week 1 1/14</td>
<td>Introduction and core concepts</td>
<td>Wells, Swanson, Belkin, Tennant, Storey</td>
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<td>Week 2 1/21</td>
<td>Search flow: interactions and interfaces</td>
<td>Saracevic, Xie, Novotny, Haglund</td>
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<td>Week 4 2/4</td>
<td>Abstracting and indexing services</td>
<td>Lawlor, Regazzi, De Guire</td>
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<td>Week 5 2/11</td>
<td>Controlled vocabulary</td>
<td>Furnas, Bates (1998), Shiri, Jacsó (2003, parts 1-3), Gault</td>
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<td>Week 6 2/18</td>
<td>Web search models and natural language searching</td>
<td>Falagas, Jansen (1998), Choo, Jacsó (2005e)</td>
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<td>Week 8 3/4</td>
<td>Advanced search operations and query refinement</td>
<td>Jacsó (2004b, 2005d), Othman</td>
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<td>Week 10 3/18</td>
<td>DUE: Live reference session</td>
<td>Midterm handed out</td>
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<td>Week 11 3/25</td>
<td>Spring Break—no class meeting</td>
<td>Harter</td>
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<td>Week 12 4/1</td>
<td>Enhancing and evaluating search results</td>
<td>DUE: Midterm (3/31, 11:59pm)</td>
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<td>Week 14 4/15</td>
<td>Project work day—no class meeting</td>
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<td>Week 15 4/22</td>
<td>Final project presentations</td>
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<td>Week 16 4/29</td>
<td>Astrobiology Science Conference—no class meeting</td>
<td>DUE: Final project writeup (5/2, 11:59pm)</td>
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<td></td>
<td>Reflective assessment (5/2, 11:59pm)</td>
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Readings


Google + SEO readings (2010).


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


