

Louisiana State University
School of Library and Information Science
LIS 7808
Special Topics in Library & Information Science: Principles of Searching
Dr. Yejun Wu

Catalog Description

Introduction to theories, principles and methods of effective searching of digital information resources.

Office

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Contact information

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Office hours

Wednesday 10-11 am or by appointment

Course Objectives

Upon completion of this course, the student should be able to:

1. Demonstrate the understanding of the complexities of searching involving interaction between information, people and technology.
2. Demonstrate basic, practical skills in effective searching.
3. Evaluate search processes and results.

Required Textbooks

- Brown, Christopher C. and Bell, Suzanne S. (2018). Librarian's Guide to Online Searching: Cultivating Database Skills for Research and Instruction, 5th Edition, ISBN-13: 978-1440861567, ISBN-10: 1440861560
- Hock, Randolph (2013). The Extreme Searcher's Internet Handbook: A Guide for the Serious Searcher, 4th Edition, ISBN-13: 978-1937290023, ISBN-10: 1937290026

16 Week Course Outline

Week 1 Overview of searching
 Readings: Hock Chapter 1. Brown & Bell Chapter 1.
 Discussion Forum #1

Project assigned, topic selection due: Week 5, progress report due: Week 9, final report due: Week 16.

- Week 2 Mediated searching & user behaviors
Readings: Brown & Bell Chapter 6 & 14.
Discussion Forum #2
HW1 assigned, due: Week 2.
- Week 3 Interaction with users & presentation of search results to users
Readings: Hock Chapter 10.
Discussion Forum #3
HW1 due.
HW2 assigned, due: Week 4.
- Week 4 Types and structures of information resources
(Note: Types include databases, search engines, and websites. Structures include database records, search engine indexes, abstracts, categories, and tags)
Readings: Hock Chapter 2 & 6. Brown & Bell Chapter 2.
Discussion Forum #4
HW2 due.
HW3 assigned, due: Week 5.
- Week 5 Controlled vocabularies (for indexing and query formulation)
Readings: Brown & Bell Chapter 3 & 7.
Discussion Forum #5
HW3 due.
HW4 assigned, due: Week 6.
- Week 6 Information retrieval systems
Reading: Stefan Büttcher, Stefan, Clarke, Charles L. A., and Cormack Gordon (2016). Information Retrieval: Implementing and Evaluating Search Engines. Chapter 2. Basic Techniques (to be provided to students)
Discussion Forum #6
HW4 due.
Project topic selection due.
HW5 assigned, due: Week 7.
- Week 7 Search engines & digital libraries
Readings: Hock Chapter 3 & 4.
HW 5 due.
HW6 assigned, due: Week 8.
- Week 8 Search techniques
Readings: Hock Chapter 5, 7, 8 & 9. Brown & Bell Chapter 4.

HW6 due.
HW7 assigned, due: Week 9.

- Week 9 Evaluation of search sources & result
Readings: (1) Brown & Bell Chapter 15. (2) Stefan Büttcher, Stefan, Clarke, Charles L. A., and Cormack Gordon (2016). Information Retrieval: Implementing and Evaluating Search Engines. Chapter 12. Measuring Effectiveness (to be provided to students)
Discussion Forum #7
HW7 due.
HW8 assigned, due: Week 10.
- Week 10 Advanced searching
Readings: Brown & Bell Chapter 5.
Discussion Forum #8
HW8 due.
Project progress report due.
HW9 assigned, due: Week 11.
- Week 11 Web searching and the invisible Web
Readings: Brown & Bell Chapter 13.
HW9 due.
HW10 assigned, due: Week 12.
- Week 12 Bibliometric & scientometric methods
Readings: Brown & Bell Chapter 8 & 10.
Discussion Forum #9
HW10 due.
- Week 13 Search services
Readings: Brown & Bell Chapter 16.
Discussion Forum #10
- Week 14 Thanksgiving. No class.
- Week 15 Ethics in searching for users; Professional searcher's new roles & future of searching
Readings:
Shaver, D.B., Hewison, N.S., & Wykoff, L.W. (1985). Ethics for online intermediaries. *Special Libraries*, 76 (Fall), 238-245.
Herman Tavani, Herman (2016). Search Engines and Ethics. Stanford Encyclopedia of Philosophy.
<https://plato.stanford.edu/entries/ethics-search/>

Week 16 Final reports due.

Grading Scheme

97-100%	A+
93-96.99%	A
90-92.99%	A-
87-89.99%	B+
83-86.99%	B
80-82.99%	B-
77-79.99%	C+
73-76.99%	C
70-72.99%	C-
67-69.99%	D+
63-66.99%	D
60-62.99%	D-
Below 60%	F

Grading Policies

All assignments are due on the dates indicated in the Course Schedule. Failure to submit an assignment on time will result in a grade no higher than a “C” for that assignment. Work submitted more than 7 days late without an acceptable excuse may be refused. Exceptions to this policy will be made only in the event of true emergencies, in which case the student must submit a written request for an exception which includes a valid explanation for failure to submit the assignment on time.

A grade of “B” indicates that the student has achieved the objectives and met the requirements for the course. A grade of “A” indicates that the student has exceeded the requirements and demonstrated a superior understanding of the principles and concepts involved. A grade of “C” indicates that the student has partially met the requirements, but demonstrates an incomplete understanding of the principles and concepts involved. A grade of “D” indicates that the work does not meet the requirements and demonstrates a lack of understanding. A grade of “F” indicates that the student did not meet any of the course requirements or objectives.

Final grades will be computed from the following activities

Class discussion forums (10 forums x 2% each)	20%
Lab Homework 1. Database interface comparison exercise	5%
Lab Homework 2. General database search exercise	5%
Lab Homework 3. Controlled vocabulary search exercises	5%
Lab Homework 4. Database search vs. Web search comparison	5%
Lab Homework 5. Database search exercise	5%
Lab Homework 6. General search engine exercise	5%

Lab Homework 7. Search strategy & tactics exercise	5%
Lab Homework 8. Specialized search engine exercise	5%
Lab Homework 9. Advance search exercise	5%
Lab Homework 10. Bibliometric & scientometric search exercise	5%
Term project	30%

Description of activities that will be graded

- Class Discussion Forums

Students are expected to participate in 10 weekly class discussion forums via Moodle. Students must complete each discussion by the designated time. These class discussion forums are supplemental by nature and designed to help students understand readings, lectures, and other teaching materials. Therefore, the student should finish their assigned readings and lecture prior to engaging in these class activities.

Only those posts with intellectual contributions will take credit. Generally, a good discussion post will address the discussion prompt/topic fully, draw on relevant literature, and incorporate personal reflections, experiences and constructive suggestions if applicable. Such a post should be at least 200 words. If within one post the 200 words requirement cannot be fulfilled, the student can make multiple responses to meet the minimum. Any post fewer than 30 words, or one that expresses an opinion without evidence or reason (such as “this is great,” “I agree”) will be ignored when grading. However, recommending good learning materials will be credited.

A student is not required to respond to other students’ post(s). The discussion grading will primarily be based on the student’s original post(s). However, responses to other students’ posts will be encouraged and be considered as positive contribution to the class, which may possibly deserve bonus points (up to an extra 20%) awarded to individual sessions.

For the convenience of grading, the class participation points of each session will be awarded at the scale of 10 points (instead of 100 points). For example, for a certain session, a student may earn 10 points on the required discussion forum and 2 bonus points at maximum. The maximum number of class participation points is 120, including the 20 bonus points. That is, even if a student earns more than 120 points on class participation, actually 120 points will be awarded ultimately. The purpose of setting the cap is to prevent the class participation from accounting for too much weight in the course grade.

- Lab Homework (HW) Assignments

Ten search exercises in using various types of search systems and information resources will be assigned. The objective of the exercises is to understand search features of various systems and gain professional searching competencies. Search topics will be designed by the instructor.

- Term project

The semester-long project aims to gain practical experience as an intermediary in conducting a cooperative searching for a user in order to find information to meet the user's information need. This is a real-life project, involving a real user with an information need, information resources, searcher-user interactions, and answers with the user's evaluation. The project may be an individual project or a group project with no more than three students.

The project may take the following steps:

1. Select a real user with an actual information need that can be met with online searches using databases and online information resources. The student will act as an intermediary for the user. Real users can be faculty members, Ph.D. students, lawyers, or business professionals who are engaged in research projects. They cannot be the student's family members or significant others.
2. Interview the user to construct a user model which represents the user's information need. The interviews can be done multiple times along the process.
3. Select appropriate information resources, formulate search strategies, and conduct the searches using appropriate search tactics.
4. Evaluate search results by the user as the search progresses. Perform iterative searching and evaluation if necessary, and possibly modify the user model.
5. Present and deliver the search results to the user in a report with an agreed format. The user report should include the user's information need, information resources used to meet the need, searching strategies, searcher-user interactions, and answers with the user's evaluation. The report should have about 2,000-4,000 words.
6. Submit a technical final report. The technical report should integrate the theories and techniques learned in the course as much as possible so that it demonstrates the student's understanding of the principles of searching and practical searching skills. The report should have about 3,000-5,000 words. The technical report can be written based on the user report, and some overlap between the two reports is allowed.

The project results in two deliverables: a user report to be delivered to the user, and a technical report to be submitted as the term paper for the class.

Expectations

LSU's general policy states that for each credit hour, the student should plan to spend at least two hours working on course related activities outside of class. Since this course is for three credit hours, you should expect to spend a minimum of six hours outside of class each week working on assignments for this course. For more information see:

<http://catalog.lsu.edu/content.php?catoid=12&navoid=822>

Academic Integrity

Louisiana State University adopted the Commitment to Community in 1995 to set forth guidelines for student behavior both inside and outside of the classroom. The Commitment to Community charges students to maintain high standards of academic and personal integrity. All

students are expected to read and be familiar with the LSU Code of Student Conduct and Commitment to Community, found online at www.lsu.edu/saa. It is your responsibility as a student at LSU to know and understand the academic standards for our community.

Students who are suspected of violating the Code of Conduct will be referred to the office of Student Advocacy & Accountability. For undergraduate students, a first academic violation could result in a zero grade on the assignment or failing the class and disciplinary probation until graduation. For a second academic violation, the result could be suspension from LSU. For graduate students, suspension is the appropriate outcome for the first offense. The most recent version of the Code of Student Conduct is available at <http://www.lsu.edu/saa>

Information for Students with Disabilities

LSU policy requires a student who claims disability status to make a formal request for accommodation through the Office of Disability Services, 115 Johnston Hall, phone 225-578-5919. This office provides the necessary evaluation and recommendations to ensure full participation in the course. For more information, go to <http://www.lsu.edu/disability>.

LSU Student Code of Conduct

The LSU student code of conduct explains student rights, excused absences, and what is expected of student behavior. Students are expected to understand this code as described here: <http://students.lsu.edu/saa/students/code>. Any violations of the LSU student code will be duly reported to the Dean of Students.

Attendance

Policy Statement 22 governs what will be accepted as an excused absence in this course. A student is required to notify the instructor in advance of the deadline if the student is unable to complete the assignment by the deadline due to an excuse consistent with Policy Statement 22. In the event of an emergency, a student must notify the instructor within five days and request an extension for any missed assignments. The instructor reserves the right to request documentation before granting approval for a make-up assignment.