

We acknowledge that we are on the traditional, ancestral and unceded territory of the hənqəminəm speaking Musqueam people.

iSchool Mission: Through innovative research, education and design, our mission is to enhance humanity's capacity to engage information in effective, creative and diverse ways.

LIBR 557 Information Retrieval Concepts and Practices – Course Syllabus (3)

Program: MLIS and Dual MAS/MLIS

Year: 2020–2021, Winter Session, Term 2
Course Schedule: Asynchronous; self-determined schedule

Location: Online

Instructor: Samuel Dodson

Office hours: By appointment; e-mail me to schedule a meeting

E-mail address: dodsons@mail.ubc.ca

Learning Management Site: http://lthub.ubc.ca/guides/canvas/

Course Goal: The primary focus of this course is on the techniques and strategies required to effectively and efficiently use information retrieval systems; it builds on the skills and knowledge you learned in LIBR 506, 507, 508 and 509. Current research in online searching is also covered. Although an ability to conduct searches in one or more systems, such as Factiva or search engines such as Google, is an expected outcome of the course, it is not a major objective. Instead, the focus is on more conceptual issues, such as database structure, language issues, database selection, search strategies, and evaluation of results. Specific online systems serve as illustrations. The course is designed to provide students with a strong base to learn other systems, especially given today's ever-changing information environment, in addition to knowledge of specific systems.

FNCC specialization: The assignments in this course can serve the requirements of the First Nations Curriculum Concentration (FNCC). If students would like to take this course for FNCC credit, they are invited to contact me to discuss this option.

Learning Outcomes:

Upon completion of this course students will be able to:

- 1. Understand the research basis for selected information retrieval concepts, theories and models [1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 4.1]
- Analyze and discuss current issues and research in information retrieval [1.3, 4.1]
- 3. Understand and appreciate the capabilities and limitations of information retrieval systems and models [1.3, 2.1]
- 4. Demonstrate appropriate search strategies and vocabularies for information retrieval [1.1, 1.3, 1.4]
- 5. Demonstrate problem solving skills to handle a complex search problems [1.1, 1.3, 1.4]
- 6. Identify and discuss problems, issues, and future developments in information retrieval [1.3, 1.4, 2.1, 2,2, 3.1, 4.1, 5.1]

Course objectives are stated in terms of student learning outcomes and reference the <u>iSchool</u> Statement on Graduate Competencies.

Course Topics:

- Use of search vocabularies (controlled, natural, free, pre-coordination, numeric, etc.) and their application in specialized search environments
- Advanced search strategy formulation
- Current information retrieval research issues and trends
- The content and structure of information resources in databases and on the WWW, with emphasis on relevance to retrieval
- Various models of information retrieval (IR) systems, WWW search tools, with emphasis on relevance to retrieval
- Principles for effective searching and variations in search strategies and tactics
- Alternatives in presentation of results to users and evaluation of retrieval results
- Identify and discuss problems, issues, and future developments in information retrieval

Prerequisites: MLIS and Dual MAS/MLIS: completion of the MLIS core. MAS: completion of MAS core and permission of the iSchool Graduate Advisor. Basic knowledge of web design highly recommended.

Format of the course: This is an asynchronous course.

Estimated number of weekly hours students should dedicate to this class (preparation activities + class activities): 8–10 hours.

Required and Recommended Reading: Weekly readings will be available online through Canvas and UBC Libraries.

Course Assignments:

Assignment Name	Due Date	Weight	Graduate Competencies
Assignment 1: Search System Presentation	January 25 (Week 3)	20%	1.1, 1.3, 1.4, 2.1, 2.2, 4.1, 5.1
Assignment 2: Keyword Wiki Entry	February 22 (Week 7)	20%	1.1., 1.3, 1.4, 2.1, 2.2, 4.1, 5.1
Assignment 3: Research Paper			1.1, 1.3, 1.4, 2.1, 2.2, 4.1,
a. Proposal	February 8 (Week 5)	10%	4.2, 5.1
b. Presentation	March 15 (Week 10)	10%	
c. Paper	April 12	30%	
Participation	Throughout the term	10%	1.1, 1.3, 2.1, 2.2, 4.1, 5.1



Course Schedule:

Date	Topic	Readings
Week 1: January 11–17	Introduction	Cool, C., & Belkin, N. (2011). Interactive information retrieval: History and background. In I. Ruthven (Ed.), Interactive Information Seeking, Behaviour and Retrieval (pp. 1–14). London, United Kingdom: Facet Publishing.
Week 2: January 18–24	Document Representation	Smucker, M. (2011). Information representation. In I. Ruthven & D. Kelly (Eds.), Interactive information seeking, behaviour and retrieval (pp. 77–94). London, United Kingdom: Facet Publishing.
Week 3: January 25–31	Query Languages	Navarro, G. (2011). Queries: Language & properties. In R. Baeza-Yates & B. Ribeiro-Neto (Eds.), Modern information retrieval: The concepts and technology behind search (2nd ed., pp. 255–280). New York, NY: Addison Wesley.
Week 4: February 1–7	Information Retrieval Models	Rasmussen, E. (2011). Access models. In I. Ruthven & D. Kelly (Eds.), Interactive information seeking, behaviour and retrieval (pp. 95–112). London, United Kingdom: Facet Publishing.
Week 5: February 8–14	Search Interfaces	Hearst, M. (2009). The design of search user interfaces. In Search user interfaces (pp. 1–28). Cambridge, United Kingdom: Cambridge University Press.
Week 6: February 15–21	No Class (Midterm Break)	No Readings
Week 7: February 22–28	Evaluation	Manning, C. D., Raghavan, P., & Schütze, H. (2008). Evaluation in information retrieval. In Introduction to information retrieval (pp. 139–161). Cambridge, United Kingdom: Cambridge University Press.
Week 8: March 1–7	Ethical Issues	Granka, L. A. (2010). The Politics of Search: A Decade Retrospective. The Information Society, 26(5), 364–374.
Week 9: March 8–14	Search Domains: Multimedia	Little, S., Brown, E., & Rüger, S. (2011). Multimedia: Information representation and access. In I. Ruthven & D. Kelly (Eds.), Interactive information seeking, behaviour and retrieval (pp. 235–254). London, United Kingdom: Facet Publishing.

Week 10: March 15–21	Search Domains: Integrated Library Systems	Rasmussen, E. (2011). Library systems. In R. Baeza-Yates & B. Ribeiro-Neto (Eds.), Modern information retrieval: The concepts and technology behind search (2nd ed., pp. 685–710). New York, NY: Addison Wesley.
Week 11: March 22–28	Search Domains: Social Search	Nichols, D., & Twidale, M. (2011). Recommendation, collaboration and social search. In I. Ruthven & D. Kelly (Eds.), Interactive information seeking, behaviour and retrieval (pp. 205–220). London, United Kingdom: Facet Publishing.
Week 12: March 29–April 4	Assignment 3b Presentation Showcase	No Readings
Week 13: April 5–11	Wrap-Up	No Readings

Evaluation: All assignments will be marked using the evaluative criteria given on the <u>iSchool web site</u>. I will make every attempt to provide explanatory feedback on assignments and to evaluate assignments consistently across students using rubrics. Students are welcome to seek additional feedback provided this is done in a respectful manner. Late or missed work will be handled at my discretion. Students may be required to provide a note from a health care provider or Access and Diversity and should communicate honestly and openly with me about late or missing work. In other words, if the student says they will hand in an assignment two days late and fails to do so, marks may be deducted.

Required Materials: Weekly readings will be available online through Canvas and UBC Libraries.

Academic Concession: If you miss marked coursework for the first time (assignment, exam, presentation, participation in class) and the course is still in-progress, *speak with me immediately* to find a solution for your missed coursework. Any concessions that will result in a change to the student record (such as late withdrawal from the course) will be referred to the Faculty of Graduate and Postdoctoral Studies for evaluation. If this is not the first time you have requested concession or classes are over, please consult the <u>Faculty of Graduate and Postdoctoral Studies' webpage on academic concession</u>, and then contact me where appropriate.

Policies and Resources to Support Student Success: UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available here (https://senate.ubc.ca/policies-resources-support-student-success)

Academic Integrity: The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work

done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply when the matter is referred to the Office of the Dean. Careful records are kept in order to monitor and prevent recurrences. A more detailed description of academic integrity, including the University's policies and procedures, may be found in the UBC Calendar: Student Conduct and Discipline. Academic misconduct includes cheating, plagiarism, and self-plagiarism http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,54,111,959 (§7).

Academic Accommodation for Students with Disabilities: Academic accommodations help students with a disability or ongoing medical condition overcome challenges that may affect their academic success. Students requiring academic accommodations must register with the Centre for Accessibility (previously known as Access & Diversity). The Centre will determine that student's eligibility for accommodations in accordance with Policy LR7: Accommodation for Students with Disabilities (Joint Senate and Board Policy). Academic accommodations are not determined by your instructors, and instructors should not ask you about the nature of your disability or ongoing medical condition, or request copies of your disability documentation. However, your instructor may consult with the Centre for Accessibility should the accommodations affect the essential learning outcomes of a course.