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 507: Methods of Research and Evaluation in Information Organizations – Course Syllabus (3)

\*This .pdf version of the syllabus is preliminary. The Canvas course pages will be the 'document' of record starting first day of class.

Program: MLIS

Year: 2021-22 Winter Term 2

**Course Schedule**: Thursday at 2:00pm **Location**: Barber Centre (IBLC) 155

**Instructor**: R. Kopak

Office location: Barber Centre (IBLC) 495

Office phone: (604) 822-2898

Office hours: Thursday 1-2 pm, or by appointment

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Learning Management Site: canvas.ubc.ca

#### Course Goal:

Research, in support of assessment and evaluation, is a core component of the information professions, and essential to good information practice. Information professionals not only aid others in carrying out research, but also rely on the research literature to improve their own evidence-based practice, and knowledgeably employ research methods in assessing and evaluating programs and services provided by the information organization to its users.

The goal of this course, therefore, is to ground students in the theory and practice of social science research methods, and to show how these methods can be usefully employed in addressing important issues within information organizations including development and evaluation of new and existing programs, services and policies. The course provides a framework for problem solving that can be used to achieve solutions in everyday practice to challenges of many kinds in a variety of organizational environments. Emphasis is on the techniques and knowledge required to carry out research for creation, assessment and evaluation of programs and services, and also on acquiring skill in critically engaging with relevant research literature.

**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. Identify, analyze, and assess the information needs of diverse individuals, communities and organizations, and consider how to respond to those needs through the design, provision and assessment of information resources, services and systems; [1.1]
- 2. Critically assess and employ the results of published and unpublished research studies. [4.1]
- 3. Contribute to the advancement of the field through evidence-based practice. [5.3]
- 4. Reflect in a critical and informed manner on the role that research plays in the information professions, as well as in society more generally. [1.4]
- 5. Effectively communicate the results of research to the profession and to the community at large [2.1]
- 6. Design and create a detailed research plan that includes: identification and evaluation of related literature, identification and clear articulation of a research problem, choice of sampling method, and choice of suitable research method for the research. [4.1]
- 7. Carry out research using appropriate research methodologies and methods relevant to the identified research problem. [4.2]
- 8. Recognize and respond in an appropriate manner to ethical considerations relevant to the research. [5.1]

#### **Course Topics:**

- Role of research in the information professions
- Evidence-based practice
- Design thinking, service design, and the applied research design process
- Critical evaluation of published research
- Valid and Reliable research
- Quantitative and qualitative research strategies
- Questionnaire design
- Observation methods
- Interviewing
- Content analysis
- Focus groups
- Data analysis
- Dissemination of research outcomes

#### **Prerequisites:**

MLIS and Dual students: LIBR 508, LIBR 509 [for full-time students these are co-requisites]

#### Format of the course:

In class lectures, group tutorials, practical group assignments.

## Required and Recommended Reading:

Please read all the way down in this section as there are several alternative versions of the main textbook described. See, especially, the second main bullet under 'Required' that describes the UK edition of the main Bryman text.

## Required:

#### Either of the following texts can be used

- Bryman, A., and Bell, E. (2019). Social Research Methods, 5<sup>th</sup> ed. Toronto: Oxford University Press. [Canadian edition]
  - I've changed to the Canadian edition of the Bryman text for this year. I had made it an optional (second) choice last year, but now it is the preferred choice. The advantage of this text is its inclusion of examples that are largely Canadian in focus. With that said, the UK edition (mentioned following) has broader coverage of the methods and techniques discussed, but it is now harder to obtain.
  - I will put the corresponding chapter numbers from the UK edition in the weekly schedule following those for the Canadian edition. If you think you might prefer the UK edition, have no fear in purchasing it, as all essential components are included.
  - You can purchase/rent an e-version of the 5<sup>th</sup> Canadian edition at:
    - Vital Source: 5<sup>th</sup> Canadian ed.
    - Redshelf: 5<sup>th</sup> Canadian ed. (may show in USD)
- Bryman, A. (2016). Social Research Methods, 5<sup>th</sup> ed. Oxford: Oxford University Press. [UK edition]
  - This is the text used in the class in past years, and chapters from it will be referenced in the weekly schedule of readings (appearing in brackets). I have switched it to a second choice as this UK edition is getting difficult to obtain, i.e., it was, but no longer is, available through Vital Source or Redshelf.
  - Note that this is the 5<sup>th</sup> UK edition. There is a newer 6<sup>th</sup> edition being released, but not yet available.
  - The differences between the 4<sup>th</sup> edition and the 5<sup>th</sup> are not substantial, but the 5<sup>th</sup> does include new material on e-research, big data, Skype interviewing, and several other interesting topics. If you have access to the 4<sup>th</sup> edition there will be no problem in mapping the chapters from the 5<sup>th</sup> edition that appear in the weekly schedule.
  - Ordinarily, I make available several bound copies of both the 4th and 5<sup>th</sup> editions of the text, on the bookshelf outside my office. There currently are no electronic copies available through the UBC Library reserve collection. I will make an announcement via Canvas if an electronic copy should become available (but likely not because of regional licensing issues).
  - If you wish to purchase a paper copy, it is cheapest to do so through an online source, e.g., Amazon, Indigo, Abe Books, etc. No copies have been ordered through the UBC Bookstore
  - There is a US edition as well, but I am not as familiar with it, though it appears very similar to the UK edition (the examples, again, are likely to be different).

#### Recommended:

- Marquez, J.J., and Downey, A. (2016). A LITA Guide to Holistic Assessment, Insight, and Improvement. Lanham, MD: Rowman & Littlefield.
  - Available online via UBC Library (through LOCR)
- Hernon, P., Dugan, R. and Matthews, J.R. (2014) Getting Started with Evaluation. Chicago, IL.: ALA Editions.
  - Available online via UBC Library (through LOCR)

## Course Assignments:

Assignment Name	Due Date	Weight	Graduate Competencies
Identification/Specification of Research Problem	Class 3 – January 27	10%	1.1, 1.4, 2.1, 4.1
<ul> <li>Individual reflection and application of research question framework</li> </ul>			
Evidence-based research review     Individual reflection and application of EBP framework	Class 7 – March 03	35%	1.4, 2.1, 4.1
Research Design	Class 12 – April 07	40%	1.4, 2.1, 4.1, 4.2
Done with one partner (optional)			
Research Minis (in-class)	Throughout Term	15%	3.1, 4.1
Done within a group (4-5 people)			
a. Self-completion questionnaire (/4)			
b. Structured observation (/4)			
c. Content analysis (/4)			
d. Focus Group Interview (/3)			

## Course Schedule [week-by-week]:

Chapter references in parentheses () refer to UK edition of Bryman text (see 'Required' above)

Class	Date	Topic
1	January 13	+ Introduction to Research in Relation to Professional Practice
		Bryman: Chapters 1 (UK ed: 1-3)
2	January 20	+ Design Thinking, Research Design and the Research Process
		+ Reading and Using Research
		Bryman: Chapters 2, 16 (UK ed: 4, 5)
3	January 27	+ Principles of Evidence Based Practice (EBP)
		+ The Role of Evaluation and Assessment in Information Organizations
		Hernon: Chapters 1-3
4	February 03	+ The Nature of Quantitative Research
		+ Asking Questions
		<ul><li>Bryman: Chapters 4, 5 (UK ed: 7, 11, 26)</li><li>Hernon: Chapter 4</li></ul>
5	February 10	+ Asking Questions (questionnaires and interviews)
		<ul><li>Bryman: Chapters 5, 11 (UK ed: 9, 10, 20)</li><li>Hernon: Chapter 5</li></ul>
6	February 17	+ Sampling: Choosing who to study
		<ul><li>Bryman: Chapters 7 (UK ed: 8, 18)</li><li>Hernon: Chapter 6</li></ul>
		+ Reading Week – No Class
7	March 03	+ Structured Observation
		Bryman: Chapter 6 (UK ed: 12)

		Hernon: Chapter 7
8	March 10	+ The Nature of Qualitative Research  • Bryman: Chapter 9 (UK ed: 17)
		+ Content Analysis
		<ul><li>Bryman: Chapter 12 (UK ed: 13)</li><li>Hernon: Chapter 8</li></ul>
9	March 17	+ Ethnographic Research + Focus Groups • Bryman: Chapters 10, 11 (UK ed: 19, 21) • Hernon: Chapter 9
10	March 24	+ Research Ethics • Bryman: Chapter 3 (UK ed: 6)
11	March 31	+ Analysis of Quantitative Data  • Bryman: Chapter 8 (UK ed: 15)
12	April 07	+ Analysis of Qualitative Data  • Bryman: Chapter 13 (UK ed: 24)
13	Online	+ Publishing Research  • Bryman: Chapter 15 (UK ed: 28)  • Hernon: Chapter 10

#### Attendance:

- Regular attendance in class is expected. If you know you are going to be absent be sure to let me know me beforehand.
- Any penalties imposed for frequent absences are at the discretion of the instructor.
- Note that if you are absent for a group, in-class practical assignment (i.e., the mini's), you'll be responsible for doing the exercise on your own.

**Evaluation**: All assignments will be marked using the evaluative criteria given on the <u>iSchool web site</u>.

For late assignments, a deduction of ½ letter grade will be made for each 3 day period in which an assignment is handed in past the due date. For example, if an assignment is handed in (posted to Canvas) on the Friday, Saturday, or Sunday after a Thursday due date, the mark given to the assignment will be reduced a half letter grade, e.g., A- to B+. If handed in on the following Monday, Tuesday, or Wednesday, a further ½ mark deduction will be made, e.g., B+ to B.

Please see sections below on Academic Concession and Academic Accommodation for exceptions to the late deduction rule. Be sure to inform the instructor beforehand if either of these apply to you.

#### **Required Materials**

See 'Required Texts' section above for citation to text used in the class. There are no other required or recommended course resources that are not available freely from the UBC Library, or designated other websites.

You may find prices vary for the texts depending on where you source them. If we use Amazon.ca (paper), and Vital Source (digital) as examples, you can expect the following associated costs.

- Bryman, A., and Bell. (2019). Social Research Methods, 5<sup>th</sup> ed. Oxford: Oxford University Press.
  - C\$120 for paperback version
  - o C\$55 for 180 day rental

**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 (<a href="https://senate.ubc.ca/policies-resources-support-student-success">https://senate.ubc.ca/policies-resources-support-student-success</a>)

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 <a href="UBC Calendar: Student Conduct and Discipline.">UBC Calendar: Student Conduct and Discipline.</a> Academic misconduct includes cheating, plagiarism, and self-plagiarism <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,54,111,959">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,54,111,959</a> (§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 <a href="Centre for Accessibility">Centre for Accessibility</a> (previously known as Access & Diversity). The Centre will determine that student's eligibility for accommodations in accordance with <a href="Policy LR7">Policy LR7</a>: Accommodation for Students with <a href="Disabilities">Disabilities</a> (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.

#### **Assignments**

## **Assignment 1 - Identification and Specification of Research Question**

Weight: 10%

#### Purpose:

This assignment enables students to practice identification and specification of a research problem or research question relevant to practice. The goal is to have students develop more grounded research ideas, and articulate them in a way that will enable an answer to the question to be found.

Samples of previous years' final assignments (that include a final version of the research question) are available on the shelf outside my office. Please see above, under 'Submission,' a couple of examples of first attempts at stating a research question.

#### Deliverable:

Students are required to submit a statement of their question/problem in no more than 2 double-spaced pages, and include:

- An appropriate and descriptive title for the research.
- A clear statement of the purpose/problem/question that is being investigated including. Keep in mind here what Bryman defines as a good research question.
- A rationale for why this question is important/relevant to the discipline, e.g. how it adds to what we
  know about how information (in whatever form) is organized, accessed or used, and/or, how it
  moves the profession forward,

and/or, how it would help in creating better programs or procedures within information practices, etc.

• One or two references from the existing research literature that provide an useful example of the kind of research (topic or method) that you would like to do.

## **Assignment 2 - Evidence-based Structured Summaries**

Weight: 35%

#### Purpose:

This assignment follows from Assignment 1 by having students critically evaluate existing literature relevant to the research question posed. A formal structure recognized in Evidence Based Library (EBL) practice will be used by students when evaluating existing research and professional literature relevant to the question.

Research on information topics borrows from many disciplines, and you are advised not to limit yourself solely to the library or archival studies literature – important, related literature can be found in the fields of education, history, sociology, and computer science for example. Not all of the items you choose must report on "empirical" research, but you should aim to include as many of this kind of research as you can. Non-research items such as opinion pieces and published interviews with knowledgeable individuals can also be included, but must be identified as such. Depending on the research problem you select, you may not find many published empirical research studies on your topic. So, be sure to check for relevant dissertations as well. Often dissertations are useful in contextualizing research problems, and the literature reviews contained are often helpful in developing your own question.

The completed assignment will consist of five parts:

- 1. An appropriate and descriptive title.
- 2. A statement of the purpose/problem/question that is being investigated (this section can be taken directly from Assignment 1).
- 3. Structured Summaries of 6-8 research articles relevant to the question under study. References to individual items must be appropriately cited in some recognized style (see #5 below). It is good practice in assignments to include in your bibliography a reference to the style manual that you use (but you must use a recognized style manual). This type of evaluation is most suited to empirically-based, quantitative and qualitative research, so try to select these types of articles for this assignment.

The actual format of the Structured Summaries to be used in the assignment are those found in the online journal "Evidence Based Library and Information Practice." For each article summary, and where feasible, the following sections should be included:

- A Review of: [full citation of article]
- Objective

- Research Strategy/Design
- Setting and Sample
- Methods
- Main Results
- Discussion/Conclusion of article

Minimally, the amount of text in each section should clearly articulate the sections purpose vis a vis the article under review. Simply re-stating the e.g., 'Research Strategy/Design' found in the abstract of an article may not be sufficient. Aim to give evidence to show that you've thoroughly read and understood the article being reviewed.

4. An analytical conclusion including (where appropriate) discussion of such things as: issues or populations not covered, findings that are consistent (or inconsistent) across the studies reviewed, whether existing studies need updating, what common concepts/variables have been used across studies, etc.

You should also include a discussion of how your initial research idea or question has changed (if it has) as a result of examining the literature. A major component of the exercise here is to transform your original research interest (which is often quite vague) into a question or questions that can be usefully answered in a single research study.

Your conclusion should act to set up the research design you will carry out in Assignment 3.

5. A reference list including all the items discussed in the review. You may include those that you have not discussed nor made reference to in the body of the paper as evidence of the extent of your search. Please put an asterisk (\*) at the beginning of the citation for those works that are reviewed in the summaries. Presentation and formatting must follow some recognized style, e.g. Turabian, APA, etc., and be consistent with the citation style in the body of the review.

Length and Scope: There is no set length for this assignment as the length will depend on the nature of the research problem, the amount of available literature, and how you choose to organize and present the literature found. Normally the assignment will be 12 pages (equivalent of 12 point Arial, double-spaced, regular margins). You should discuss minimally 6-8 articles. In most cases, section 3 of this assignment will be between 2000 and 2500 words in length.

Assessment: Your assignment will be assessed based upon the following criteria:

- Representativeness of the research literature examined (scoping)
- Evidence of critical assessment of the articles examined
- Strength and clarity of conclusion based on the articles examined
- Overall clarity and correctness of writing (grammar, spelling, and vocabulary)
- Strength of rationale for changes to initial research question resulting from engagement with the research literature via the Summaries. If your research question does not change substantially, elaborate on why no change was required.
- Evidence of understanding of the purpose and application of the Critical Appraisal Checklist

You may want to browse some more traditional examples by referring to published literature reviews. Most of those listed below are available full-text on-line from the UBC Library. Be aware that these are in more traditional, literature review format, but may still help guide your thinking:

- Ameen, K. (2006). From acquisitions to collection management: Mere semantics or an expanded framework for libraries? Collection Building. 25 (2): 56-60.
- Brown, A. (2003). Reference services for children: Information needs and wants in the public library. Australian Library Journal. 53 (3): [np].
- Chowdhury, G. (2010). From digital libraries to digital preservation research: The importance of users and context. Journal of Documentation. 66 (2): 207-223.
- Coumou, H.C.H., Meijman, F.J. (2006). How do primary care physicians seek answers to clinical questions: A literature review. Journal of the Medical Library Association, 94 (1): 56-60.
- Davis, P.M., et al. (2011). The impact of free access to the scientific literature: a review of recent literature. Journal of the Medical Library Association, 99 (3): 208-17.
- Edmunds, A., and Morris, A. (2000). The problem of information overload in business organizations: a review of the literature. International Journal of Information Management, 20 (1): 18-28.
- Fourie, I. (2006). Learning from web information seeking studies: Some suggestions for LIS practitioners. The Electronic Library, 24 (1): 20-37.
- Magi, Trina J. (2011). Fourteen Reasons Privacy Matters: A Multidisciplinary Review of Scholarly Literature. The Library Quarterly, 81 (20): 187-209.
- O'Connor, P. (2002). Determining the impact of health library services on patient care: a review of the literature. Health Information and Libraries Journal. 19(1): 1-13.
- Ondrusek, Anita L. (2012). What the research reveals about graduate students' writing skills: A literature review. Journal of Education for Library & Information Science, 53 (3): 176-188.
- Smith, C.A. (2011). Consumer language, patient language, and thesauri: A review of the literature. Journal of the Medical Library Association. 99 (2): 135 144.
- Van Wingen, M., and Bass, A. (2008). Reappraising archival practice in light of the new social history. Library Hi Tech, 26 (4): 575-585.

Perhaps more importantly, any articles you look at will have literature review sections, albeit in condensed form, that can provide some help. The value in looking closely at these is to observe how the review of the literature in the article supports the question addressed in the research that the article is about.

As mentioned, another good place to look for relevant literature that might aid in formulating your question is in theses and dissertations. All of these should contain a review of the literature relevant to the topic or question addressed in the thesis or dissertation.

#### **Assignment 3 - Research Design**

Weight: 40%

#### Purpose:

This is the capstone project for the course, and builds on the entire course content, including the previous assignments completed in the course. You are not required to, but if you are working with a partner, choose which of your two projects to pursue, or how you will combine the existing ones (if they

are similar). Using the topic and research question(s) developed in the evidence-based literature review, plan a research project that would enable you to answer the question(s) or problem(s) addressed.

#### Deliverable:

The completed assignment will include (extent will vary according to topic):

- The purpose/problem statement (possibly revised from the Research Problem Specification) for which the research will provide an answer.
- An overall description of the research strategy employed, and method(s) to be used, including an explanation of why the particular methodology, and specific method(s), you have chosen is (are) most appropriate given the nature of the topic, resources. etc.
- A statement of any ethics concerns (see 10 below), and how you would address them in the research.
- A written set of instructions on exactly how to gather the data (exclusive of selecting the sample). Write this as if you were going to hand the research instrument(s) and other documentation (e.g. a code book if you are using a questionnaire, observation, etc.) to another person who would actually carry out the research without you being present.
- A description of the sampling strategy and why you chose this particular approach.
- A concluding section that outlines what you might look for in the results (i.e., how results could be analysed/interpreted in order to answer your research question).
- Two copies of the actual data gathering instrument, e.g. a questionnaire, interview schedule, interview scripts, etc. One copy should be blank, the second should provide exemplary data for a case or two. In providing the exemplary data think about how someone might actually fill out the instrument in real life, or the responses they might give in, say, and interview. Even better, ask a friend or colleague to act as pseudo-participant, i.e., treat it as a pilot test. If you make changes as a result, describe these in the write-up.
- If appropriate, a codebook specifying codes, code definitions, coding instructions, etc.
- If appropriate, include a data coding sheet or sample of a database on which the data from the data gathering instrument is to be coded or recorded. This should include the variables or categories (as headings). If you are using something structured like a questionnaire, you can 'fill-in' the data from the 'pilot test' completed two bullet points previously.
- A copy of the "Certificate of Completion" for the "The TCPS 2 Tutorial Course on Research Ethics (CORE)." Each member of your group must complete this tutorial and each must provide a copy of the completion certificate. If you have completed this tutorial within the last three years (must be TCPS 2) you can use the certificate you already have. Those who have completed TCPS 1 must update to TCPS 2. To take the tutorial you will need to register with the site. To begin the tutorial, please go to:
- https://ethics.gc.ca/eng/education\_tutorial-didacticiel.html