

## GLIS 611-W2017: RESEARCH PRINCIPLES AND ANALYSIS

DISCLAIMER: This syllabus is provided for informational use only. Content and assignments may change before the start of the course and may differ between course sections. Students enrolled in this course are to retrieve the official version from the McGill course management site.

### General information

When: Wednesdays 8:35-11:25pm, McGill, Education Building rm. 437.  
Instructor: Prof. Ilja Frissen, [ilja.frissen@mcgill.ca](mailto:ilja.frissen@mcgill.ca), phone: 398-4684.  
Office hours: After class (11:30-1pm) or by appointment. SIS mansion (3661 Peel), rm. 210.  
Always use your McGill address to communicate with us via e-mail (see email policy below).

### Learning outcomes

At the end of the course you will be able to

- Think critically about research in library and information studies (LIS)
- Distinguish quantitative and qualitative research methods used in LIS
- Identify the various stages of the research process
- Evaluate and synthesize published research
- Compute and interpret basic descriptive and inferential statistical techniques using MS Excel
- Conduct basic planning, conducting, and reporting of research

### Course content

- Foundations of research: theories, observation, assumptions, limitations, and ethics.
- Steps in the research process: select topic, focus question, design study, and collect, analyze and interpret data.
- Research principles in quantitative and qualitative research: hypothesis, variables, measurements, validity, and reliability.
- Communicating research: the research proposal, research report, and publication process.
- Data collection, management, and analysis
- Statistical description and analysis

### Suggested texts

There is no required textbook. The following texts are suggested reading. Other readings will be provided or sought out by the student.

#### *Research methods*

[Bry] Bryman, A., Bell, E. A., & Teevan, J. J. (2012). *Social Research Methods* (3rd Canadian ed.). Don Mills, ON: Oxford University Press. **(H62 B787 2012, on reserve at HSSL)**

[Con] Connaway, L. S., & Powell, R.R. (2010). *Basic Research Methods for Librarians* (5<sup>th</sup> ed.). Santa Barbara, CA: Libraries Unlimited. **(Z669.7 P68 2010, on reserve at HSSL)**

#### *Statistics*

[Sal] Salkind, N. J. (2011). *Statistics for People who (Think They) Hate Statistics*. (4<sup>th</sup> ed.) Los Angeles, CA: Sage. **(HA29 S2365 2011, on reserve at HSSL)**

#### *Writing and style*

[APA] American Psychological Association (2010). *Publication Manual of the American Psychological Association* (6<sup>th</sup> ed.). Washington, DC: Author.

## GLIS 611-W2017: RESEARCH PRINCIPLES AND ANALYSIS

[Zin] Zinsser, W. (2006). *On Writing Well: The Classic Guide to Writing Nonfiction* (7<sup>th</sup> ed.). New York, NY: Harper. (PE1429 Z5 2006, on reserve at HSSL)

### Instructional method

At the core of the course is **an actual scientific survey** conducted by the class. Throughout the course we will be investigating whether there is a relationship between library anxiety and someone's personality using a combination of two surveys commonly used in LIS and psychology.

Instruction features a combination of lectures, seminars, and in-class activities. In addition, there are several required activities to be completed before class. The (guest) lectures are reserved for introductions to major themes, such as (scientific) research principles, ethics, and statistics. Seminars are meant to create a platform for discussing issues arising from the scientific study.

### Overview

		Lecture	Seminar	In Class activity	To prepare for class activity reading	Due Survey Assign.		
1	Jan 11	Intro						
2	Jan 18	Discuss S1		Survey questions	Con: 1, 2, & 3	S1		
3	Jan 25	Discuss H1		Literature Review	H1 Sal: 6			
4	Feb 1	Discuss A1& H2		Research Questions	H2		A1	
5	Feb 8	Descriptive Statistics		Descript. Stats in Excel	Sal: 2 & 3			
6	Feb 15			AE1	AE1			
7	Feb 22	Discuss S2		AE2	AE2	S2		
Bring laptop to class								
8	Mar 8			dStats: Our survey	Con: 9; Sal: 4		A2	
9	Mar 15	Banafsheh Asadi: TBD		iStats: Our survey	H3 Sal: 15 & 16		A3	
10	Mar 22	Prof. Bartlett: QJ data		Coding interview data	TBD			
11	Mar 29	Guest Lecture: TBD			Con: 11		A4	
12	Apr 5	Loose ends						
13	Apr 14						A5	
Bring laptop to class								

### MS Excel

Some of the in-class activities involve exercises with MS Excel, it is therefore recommended to bring your laptop to class on those occasions. If you don't have a laptop, or you do not have Excel (or equivalent software), small groups can be created.

### Useful materials

1. Why Basic Research is Important: <https://www.youtube.com/watch?v=6gnsQjPCC78>
2. <https://www.whitehouse.gov/blog/2015/06/02/value-basic-research>
3. <http://spectrum.mit.edu/spring-2014/the-brilliance-of-basic-research>
4. Strategies for Synthesis: <https://www.youtube.com/watch?v=c7HtCHtQ9w0> (12:09)
5. Tips on Scientific Writing - Part 1: <https://www.youtube.com/watch?v=91jo4kX7Cq0> (3:46)
6. Tips on Scientific Writing - Part 2: <https://www.youtube.com/watch?v=O-NZFSrqHB0> (2:12)
7. Science Writing: Practice Makes It (Almost) Perfect: <https://www.youtube.com/watch?v=-zPZtgVQSfc> (25:00)
8. How to Write a Great Research Paper: <https://www.youtube.com/watch?v=g3dkRsTqdDA> (34:24)

## GLIS 611-W2017: RESEARCH PRINCIPLES AND ANALYSIS

9. <http://www.mcgilldaily.com/2012/09/mk-ultraviolence/>. If you search Youtube for “Stanford Prison Experiment” you’ll find many hits. Plenty of hits also for “MK-ULTRA McGill”
10. Qualitative and quantitative research: <https://www.youtube.com/watch?v=2X-QSU6-hPU>
11. Reliability and validity: <https://www.youtube.com/watch?v=9ltvDNAsO-I>

### Assignments and evaluation

There is a substantial practical component. Beside the Survey, there are in-class activities and assignments aimed at developing and practicing skills such as evaluating research articles, synthesizing literature, as well as processing, summarizing, and describing raw numeric data using various statistical and graphical techniques.

More detailed information and descriptions will be provided at an appropriate time.

Type		Description	%	Comment
Assignment	A1	Mini literature review	5	
	A2	Article evaluation	10	
	A3	Literature review	15	Can become part of A5
	A4	Descriptive statistics & visualization	10	
	A5	Final report of research activities	40	Meets submission standards
Activity (Pass/Fail)	AE	Article evaluation	20	Can be combined with A1 For lecture Prof. Joan Bartlett
	H1	Search for Survey pitfalls		
	H2	Find ex. of good and bad synthesis		
	H3	Collect interview data		
Survey	S1	Fill out survey	0	
	S2	Collect survey data from <b>6 participants</b>		

### Papers for AE activity (tentative)

#### AE1

Fitzpatrick, E. B., Moore, A. C., & Lang, B. W. (2008). Reference librarians at the reference desk in a learning commons: A mixed methods evaluation. *Journal of Academic Librarianship*, 34(3), 231-238.

Van Scoyoc, A. M. (2003). Reducing library anxiety in first-year students. *Reference & User Services Quarterly*, 42(4), 329-341.

#### AE2

Mbabu, L. G., Bertram, A., & Varnum, K. (2013). Patterns of undergraduates' use of scholarly databases in a large research university. *Journal of Academic Librarianship*, 39(2), 189-193.

Wirth, W., Sommer, K., Pape, T., & Karnowski, V. (2016). Success in online searches: Differences between evaluation and finding tasks. *Journal of the Association for Information Science and Technology*, 67(12), 2897–2908.

## Email Policy

To ensure that your emails are properly filed for prompt reading, be sure to include [611] in the subject line of your email. If you send your email from myCourses the subject line will be correctly annotated for you. Note that it is my policy to not read or respond to work related emails over the weekend. Please consider this when preparing for assignments.

Questions of a non-confidential nature (e.g., clarification on assignments, or course content) should be submitted to the discussion group. Typically many students have the same question. Using the discussion board not only reduces the number of emails I must manage (which indirectly helps you by freeing up my time to better respond to your questions), but also benefits the students in the class who are more shy and do not as readily seek out help.

## McGill Policy Statements

McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism, and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/) for more information).

*L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/)).*

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

*Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté.*

If you have a disability please contact the instructor to arrange a time to discuss your situation. It would be helpful if you contact the Office for Students with Disabilities at 514-398-6009 before you do this. Additional policies governing academic issues, which affect students, can be found in the McGill Charter of Students' Rights (The Handbook on Student Rights and Responsibilities is available at

[www.mcgill.ca/files/secretariat/Handbook-on-Student-Rights-and-Responsibilities-2010.pdf](http://www.mcgill.ca/files/secretariat/Handbook-on-Student-Rights-and-Responsibilities-2010.pdf)).