Spring 2016
[MW, 12:20-1:35 PM]
Manning Hall, RM 208

INLS 581

Research Methods Overview

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Description

An introduction to research methods used in information and library science, exploring the design, interpretation, analysis and application of published research.

Goals

- To have fun while exploring and learning about research methods.
- Gain an understanding of the concepts and terminology used in ILS research and of the methods used to perform this research.
- Become acquainted with different research specialties and approaches in ILS.
- Improve ability to read, evaluate and appreciate research.
- Improve quantitative, logical and analytical thinking abilities.

Requirements

Read, think, discuss, listen, research and write.

- You are expected to read the assigned readings by the dates listed on the schedule. This is a very reading-intensive course, so please schedule accordingly.
- You should have access to the readings during class.
- This is a small class so your participation is critical. Be prepared to ask questions and discuss the readings in class.
- Please let me know in advance if you will not be able to attend class.

Evaluation

Your major assignments for this course include: Participation (10%), Reflective Journaling (20%), Meta-reflections (5%), Research Reviews (15%), Mid-term Exam (25%) and Final Exam (25%).

Acknowledgement: Thanks to Casey Rawson for her additions to this syllabus.

Materials

Readings will be placed in the Sakai site or you will need to obtain them from UNC Library's online collections. The following text is **required**:

Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information & Library Science*. Libraries Unlimited: Westport, CT.

This book is available for purchase at UNC Book Stores and online. It is also on reserve in the SILS Library.

Milestones

February 24 (10%)
Research Review 1

March 9 (2.5%)
Meta-Reflection 1

March 10-12 (25%)
Mid-term Exam (online)

April 6 (5%)
Research Review 2

April 27 (2.5%)
Meta-Reflection 2

April 30-May 2 (25%)
Final Exam (online)

Assignments

Participation (10%)

You are an important part of this course. There are few things worse than teaching to a half-empty classroom. One thing worse than teaching to a half-empty classroom is teaching to a room full of people engaged in conversations with others or with their eyes glued to their computers! Because your presence is key to a successful class, your participation will be 'graded.'

Furthermore, the ability to work successfully and communicate effectively with your colleagues will be vital to your career as a professional. Consequently, you must be thoughtful in your interactions with your peers, instructor, and resource people. Your active participation in class is vital not only for your own learning, but for the learning of everyone in the class. I believe that each of you has valuable experiences and contributions that will deepen and extend our understanding of the course content, both during class and online. Therefore, I expect you to be engaged in class. This does *not* mean that you need to raise your hand for every question in class - the quality of your participation matters just as much as the quantity, and when a handful of people dominate class discussions it is difficult for other students to fully engage. There are several ways to actively participate in class, and each will factor in to your class participation grade:

- *Attendance.* You are expected to attend all classes and to arrive to class before it starts. You will lose participation points for excessive and unexcused absences and for arriving late to class. You should be seated and ready to start at 9:00 AM.
- *Behavior.* Behave professionally. Be courteous to your classmates and course instructor by not conversing with others during class lectures. Turn off cell phones, pagers, and other devices that might disrupt class. Use laptops and other devices to support current course activities only. Pay attention. Daydream infrequently. Do not sleep during class.
- *General Participation.* Class participation consists of doing the following: being prepared for class, making observations about the readings, asking questions, taking notes and actively listening.
- *Group Activities.* In addition to large-group discussion, this class might include individual, pair, and small-group activities, and I will look for your engagement in all of those activities. I understand that it is not always easy to jump into a large-group discussion, but if you do not typically participate in large-group discussion, I will look extra closely for quality participation from you in smaller groups. Take notes, ask questions, and above all, actively engage your mind with the ideas we are exploring in class through discussion.
- *Use of Laptops.* Use of laptops is strongly discouraged. Studies have shown that students who take notes on paper actually do better on exams. Not only do laptops provide many distractions, I have often observed that students work hard to type a verbatim transcript of what I am saying which means that they are not really paying attention to what I am saying, are not thinking about what I am saying, and are not being selective about what they record. It is also the case that we will work many problems on the board (think math and formulas): it can be difficult to quickly and accurately capture this on a laptop.

Reflective Journaling (20%)

You will be asked to create a journal entry for each class about the daily readings and subsequent class discussion. One of the most important things I'd like you to do in this course is carefully read and actively engage with the assigned readings. One of the best ways for me to evaluate the extent to which you do this is through a reading journal, or blog. I believe you will benefit from keeping the blog because writing about what you have read should help you synthesize, consolidate, integrate and subsequently retain the material and be better prepared for class. You will use the blog function in the Sakai site as your journal. *Your blog entries will be private and will not be viewable by anyone but me.*

You will have two entries per class. The first should be done after you have finished the readings (Pre-Class Reflection). **This is due at 9:00 AM on the date of class**. This will give me time to review your comments before class. The second should be completed within 24 hours after class discussions (Post-Class Reflection). If you are absent, you can still submit a Pre-Class Reflection if you have made prior arrangements with me, but it is not possible for you to submit a Post-Class Reflection. **You can skip FOUR entries without penalty**. Your entries should be around 200-300 words.

You may use the starter questions below to structure each entry, although you do not need to answer all questions in order for every post. Summaries of the readings or lengthy quotations from the readings will not count toward your word count.

Pre-Class Reading Reflection:

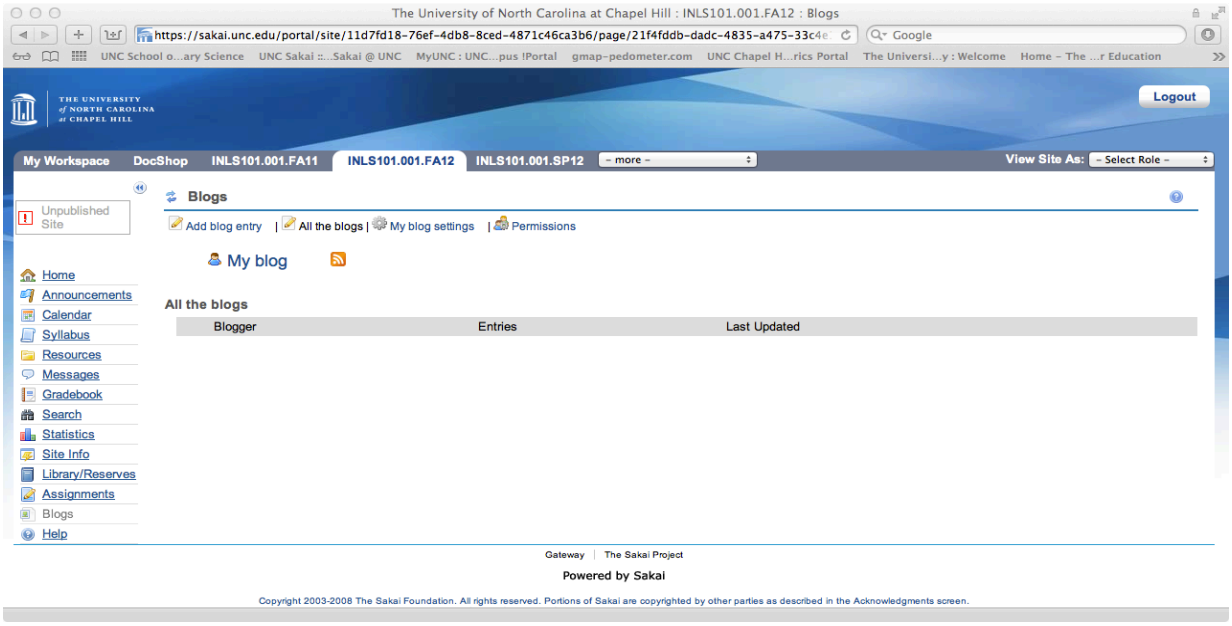
- What stood out for you? What did you learn?
- What questions do you have? What connections did you make?
- What can you conclude?

Post-Class Reflection:

- How has your thinking changed after class? What did you learn in class?
- Do you still have questions? Do you better understand your pre-class questions?
- Did you make new connections?
- What are some possible applications of this research or research method to the information professions? To your particular interests within the LIS field?

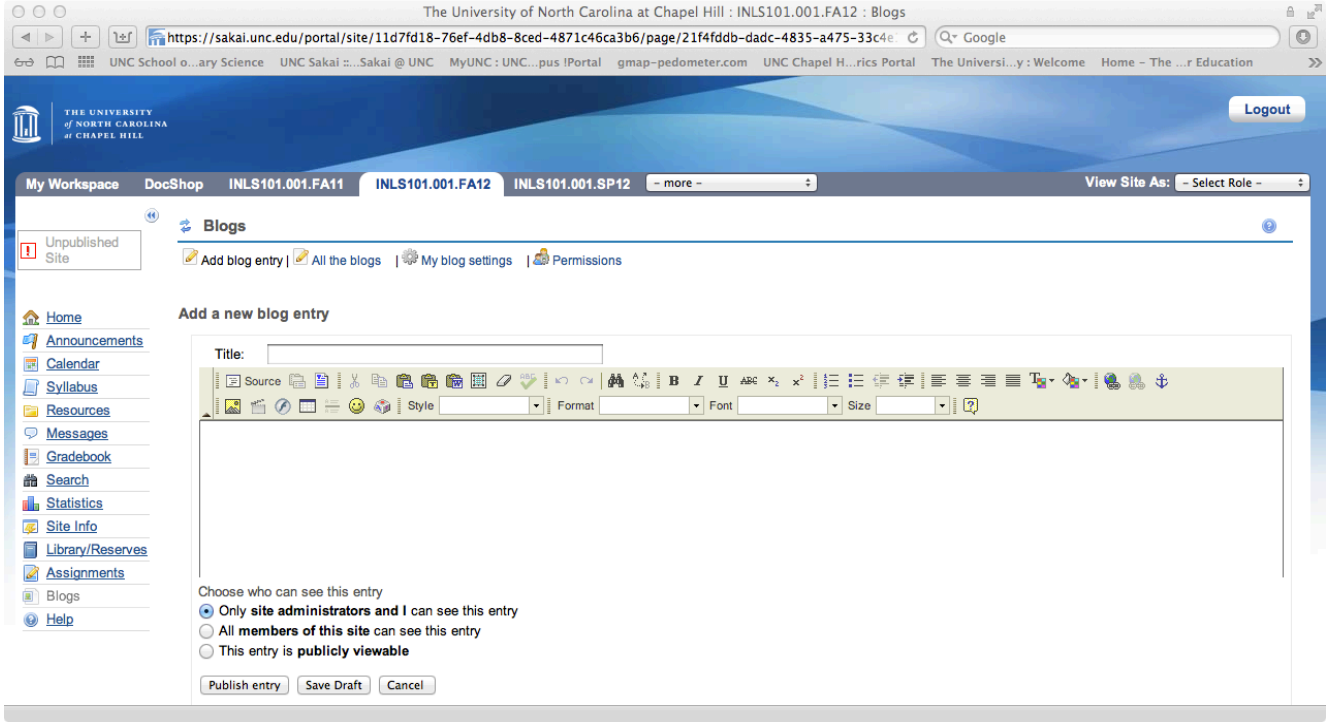
Start January 13 with Pre- and Post-Class Reflections.

You will post your blog entries in Sakai. From our course Sakai page, you should click on the link labeled "Blogs," and then "Add Blog Entry" (see below).



From the next window (see below), you can enter your blog post. In the "title" area, just use the class date.

It is VERY IMPORTANT that you click the button that limits who can see the message. You should click the button next to, "Only site administrator and I can see this entry." I am the site administer so this means that only you and I can see the post. This is NOT the default option, so you'll have to select this each time you post an entry. If you accidentally forget to do this, send me an email and I'll remove the post as soon as I possible. Once you are ready to submit, click "Publish entry." Unfortunately, there is no way to change the default setting to make everything private (I checked).



Meta-Reflections (5%)

At two points during the semester (mid-term and end-of-semester), you will create a meta-reflection about how your thinking has changed since you started the class. In this reflection, you should attempt to integrate some of the materials we have discussed during the first- and second-half of class, respectively for the mid-term and end-of-semester reflections. Meta-reflections should be about 400-500 words.

Research Reviews (1@10% and 1@5%)

Regardless of whether you ever conduct a research study after your master's paper (I hope you do!), in order to be a leader in your chosen career you will need to be able to read, evaluate, and appreciate research in your field. In this course, we will focus on reading research articles with an eye toward describing and evaluating the methods used by the researchers. You will conduct two research reviews:

- For the first review, choose two articles published in an ILS journal or conference proceeding. You might want to choose either two articles that both address a similar topic / research question using different methods, or two articles that address different research questions using the same method (you could choose two totally unrelated papers, but choosing papers that are similar in terms of either topics or methods should make your job easier). This review should be about five double-spaced pages.
- For the other review, choose one SILS masters paper from the Dean's Achievement Award list (http://sils.unc.edu/about/awards/sils-achievement). You can find PDF versions of these papers online at http://tinyurl.com/SILSmps. This review should be about two double-spaced pages.

In your review, you should start by describing the research: what was done, why it was done, how it was done, what was found. This should be a *neutral* description without any commentary or analysis. Then, discuss the research. (I hesitate to use the word 'critique' because sometimes people think that means to shred something!) Your discussion should be balanced, pointing out what you see as the strengths and weaknesses of the work. Where you note weaknesses, try to suggest ways the study might have been improved.

Please print your reviews and bring them to class on the day they are due to share with classmates (and me!).

Follow APA style when formatting your reviews. You do not need a coverage page, abstract or running head.

Mid-term and Final Exams (25% each)

Exams!?! Yeah, I know … scary. But they don't have to be! It is important to me that you internalize some of the content of this class and exams are good assessment methods for evaluating knowledge of a range of topics and issues.

You will take the mid-term and final exams on your own time – I will make the exam available to you online during a specified window of time and you will have up to three hours to complete each exam once you open it.

Exams will be closed-book and closed-note. The final exam will be cumulative and integrative. The format of the exam questions will be varied. I like open-ended questions; in particular, I like to present stimuli (for example, a passage from a piece of research) and ask you questions about the stimuli (for example, what type of sampling was used). You might also have a few multiple-choice questions and statistics problems to work.

Grading

Based on UNC Registrar Policy for graduate-level courses (http://regweb.unc.edu/resources/rpm24.php), both assignment and semester grades will be H, P, L or F. Few students will obtain an "H," which signifies an exceptionally high level of performance (higher than an "A" in an A-F system). The following is a more detailed breakdown:

H	Superior work: complete command of subject, unusual depth, great creativity or originality. (95-100%)
P+	Above average performance: solid work somewhat beyond what was required and good command of the material. Note: The university does not recognize this grade, but I use it for work that is better than P, but not quite at the level of H. (90-94%)
P	Satisfactory performance that meets course requirements (expected to be the median grade of all students in the course) (80-89%)
L	Unacceptable graduate performance: substandard in significant ways. (70-79%)
F	Performance that is seriously deficient and unworthy of graduate credit. (69% and below)

January 11: Introductions and Course Overview

January 13: Overview of Research in Information and Library Science

- Neuman, W. L. (2005). *Social research methods: Qualitative and quantitative approaches (6th Edition)*. Allyn and Bacon Publishing [Ch. 1; parts of Ch. 2]. **(Course Directory)**
- Wildemuth, B. M. (2009). Applications of Social Research Methods to Questions in Information and Library Science. Libraries Unlimited: Westport, CT. (Chs. 1-6).

January 18: Holiday: Martin Luther King, Jr. Day

January 20: Research Questions and Approaches

- Shachaf, P., & Horowitz, S. (2006). Are virtual reference services color blind? *Library & Information Science Research, 28*(4), 501-520.
- Sugimoto, C.R., Tsou, A., Naslund, S., Hauser, A., Brandon, M., Winter, D., Behles, C., & Finlay, S.C. (2014). Beyond gatekeepers of knowledge: Scholarly communication practices of academic librarians and archivists at ARL institutions. *College & Research Libraries, 75*(2), 145-161.
- Brennan, K., Kelly, D., & Arguello, J. (2014). The effect of cognitive abilities on information search for tasks of varying levels of complexity. *Proceedings of the Information Interaction in Context Conference (IIiX)*, Regensburg, Germany. **(ACM Digital Library)**
- Woelfer, J. P. & Hendry, D. G. (2012). Homeless young people on social network sites. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '12)*, Austin, TX, 2825-2834. **(ACM Digital Library)**

January 25: Theories and Models

- Bates, M. J. (2005). An introduction to metatheories, theories and models (Ch. 1). In K. E. Fisher, S. Erdelez, & L. E. F. McKechnie's (Eds.) *Theories of Information Behavior*. ASIST Monograph Series, Information Today, Inc.: Medford, NJ.
- Rioux, K. S. (2010). Metatheory in library and information science: A nascent social justice approach. *Journal of Education for Library and Information Science, 51*(1), 9–17.
- SKIM: Kumasi, K. D., Charbonneau, D. H., & Walster, D. (2013). Theory talk in the library science scholarly literature: An exploratory analysis. *Library & Information Science Research, 35*, 175-180.

January 27: Hypotheses and Variables

- Neuman, W. L. (2005). *Social research methods: Qualitative and quantitative approaches (6th Edition)*. Allyn and Bacon Publishing, pgs. 160-166: The Language of Variables and Hypotheses; pgs. 181-188: Conceptualization and Operationalization. **(Course Directory)**
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* Thousand Oaks, CA: SAGE. (pgs. 129-137). **(Course Directory)**
- Kracker, J. (2002). Research anxiety and students' perceptions of research: An experiment. Part 1. Effect of teaching Kuhlthau's ISP model. *Journal of the American Society for Information Science & Technology, 53*(4), 282-294.

February 1: Variables and Measurement

- Wildemuth, B. M. (2009). Applications of Social Research Methods to Questions in Information and Library Science. Libraries Unlimited: Westport, CT. (Ch. 27)
- Neuman, W. L. (2005). *Social research methods: Qualitative and quantitative approaches (6th Edition)*. Allyn and Bacon Publishing, pgs. 198-200: Levels of Measurement. **(Course Directory)**
- Frandsen-Thorlacius, O., Hornbæk, K., Hertzum, M., & Clemmensen, T. (2009). Non-universal usability? A survey of how usability is understood by Chinese and Danish users. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '09)*, Boston, MA, 41-50.
- SKIM: Hornbæk, K. (2006). Current practice in measuring usability: Challenges to usability studies and research. *International Journal of Human-Computer Studies, 64*, 79-102.

February 3: Measurement and Scales

- Wildemuth, B. M. (2009). Applications of Social Research Methods to Questions in Information and Library Science. Libraries Unlimited: Westport, CT. (Ch. 28)
- Read one of the following:
    - Erfanmanesh, M., Abrizah, A., & Karim, N. H. A. (2012). Development and validation of the Information Seeking Anxiety Scale. *Malaysian Journal of Library & Information Science 17*(1), 21-39.
    - O'Brien, H. L. & Toms, E. G. (2010). The development and evaluation of a survey to measure user engagement. *Journal of the American Society for Information Science & Technology, 61*(1), 50-69.

February 8: Experiments and Logs

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Libraries Unlimited: Westport, CT. (Chs. 11-12, 18)
- Arguello, J., Wu, W.C., Kelly, D., & Edwards, A. (2012). Task complexity, vertical display and user interaction in aggregated search. *Proceedings of the 35th Annual ACM International Conference on Research and Development in Information Retrieval (SIGIR '12)*, Portland, OR, 435-444. **(ACM Digital Library)**
- Review previous experiments: Brennan, et al. (2014), Kracker (2002), Shachaf & Horowitz (2006)

February 10: Usability Studies

- Rubin, J. & Chisnell, D. (2008). Handbook of Usability Testing: How to Plan, Design and Conduct Effective Tests. Wiley Press. **(UNC eBook)**
    - Optional: Chapter 1: What makes something usable?
    - Required: Chapter 2: What is usability testing?
- Cockrell, B. J., & Jayne, E. Al. (2002). How do I find an article? Insights from a Web usability study. *Journal of Academic Librarianship, 28*(3), 122-132.

February 15: Sampling & Descriptive Statistics

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Libraries Unlimited: Westport, CT. (Chs. 33-34).
- Dell, N., Vaidyanathan, V., Medhi, I., Cutrell, E., & Thies, W. (2012). "Your's is better! Participant response bias in HCI. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '12)*, Austin, TX, 1321-1330. **(ACM Digital Library)**

February 17: Hypotheses Testing; T-test & ANOVA

- Banerjee, A., Chitnis, U. B., Jadhav, S. L., Bhawalkar, J. S., & Chaudhury, S. (2009). Hypothesis testing, type I and type II errors. *Industrial Psychiatry Journal, 18*(2), 127-131.
- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Libraries Unlimited: Westport, CT. (Ch. 37).
- Review previous experiments: Kracker (2002), Arguello, et al. (2012), Brennan, et al. (2014)

February 22: Correlation & Regression

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Libraries Unlimited: Westport, CT. (Ch. 36).
- Lampe, C., Vitak, J., Gray, R., Ellison, N. (2012). Perceptions of Facebook's value as an information source. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '12)*, Austin, TX, 3195-3204. **(ACM Digital Library)**

February 24: Statistics Wrap-up & Tools

- Bring laptop to class and make sure you can connect to SPSS through UNC's virtual lab
- **Due: Research Review 1**

February 29: Content and Collection Analysis

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Libraries Unlimited: Westport, CT. (Ch. 29).
- Sood, S. O., Antin, J., & Churchill, E. F. (2012). Profanity use in online communities. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '12)*, Austin, TX, 1481-1490. **(ACM Digital Library)**
- Hughes-Hassell, S., Overberg, E., & Harris, S. (2013). Lesbian, gay, bisexual, transgender and questioning (LGBTQ) themed literature for teens: Are school libraries providing adequate collections? *School Library Research, 16*. Available online at: http://files.eric.ed.gov/fulltext/EJ1012828.pdf**.**

March 2: Bibliometrics

- Cronin, B. (2014). Scholars and scripts, spoors and scores. In B. Cronin & C. R. Sugimoto (Eds). *Beyond bibliometrics: Harnessing multidimensional indicators of scholarly impact*. MIT Press. **(Course Directory)**
- Lariviere, V., Ni, C., Gingras, Y., Cronin, B. & Sugimoto, C. R. (2013). Bibliometrics: Global gender disparities in science. Nature, 504 (7479), 211-213. Online: **http://www.nature.com/news/bibliometrics-global-gender-disparities-in-science-1.14321**
- SKIM: Lariviere, V., Sugimoto, C. R., & Cronin, B. (2012). A bibliometric chronicling of library and information science's first hundred years. *Journal of the American Society for Information Science & Technology, 63*(5), 997-1016.

March 7: Systematic Reviews

- Petticrew, M. & Roberts, H. (2006). *Systematic Reviews in the Social Sciences: A Practical Guide*. Blackwell Publishing, Malden, MA. Online: **http://www.cebma.org/wp-content/uploads/Pettigrew-Roberts-SR-in-the-Soc-Sc.pdf**
    - Chapter 1: Why do we need systematic reviews?
    - Appendix 2: MOOSE Guidelines
    - Appendix 3: Example of a flow diagram from a systematic review
    - Appendix 4: Example data extraction form
- Clark, T. T., McGovern, P., Mgbeokwere, D., Owusu, H., & McGraw, K. A. (2014). Systematic review: The nature and extent of social work research on substance use disorders treatment interventions among African Americans. *Journal of Social Work, 14*(5), 451-472. Behold the power of the librarian!: http://guides.lib.unc.edu/km

March 9: Mid-semester Catch-up and Review

- **Due: Mid-semester Meta-Reflection**
- **Mid-term online: March 10-12**

March 14, 16: Spring Break

March 21: Surveys

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Libraries Unlimited: Westport, CT. (Chs. 13 & 26).
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). Internet, Mail and Mixed-Mode Surveys (3rd Edition). John Wiley & Sons, Inc.: Hoboken, NJ. Chapters 1-3. **(Course Directory)**
- Review: Sugimoto, C.R., Tsou, A., Naslund, S., Hauser, A., Brandon, M., Winter, D., Behles, C., & Finlay, S.C. (2014). Beyond gatekeepers of knowledge: Scholarly communication practices of academic librarians and archivists at ARL institutions. *College & Research Libraries, 75*(2), 145-161.

March 23: Surveys

- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). Internet, Mail and Mixed-Mode Surveys (3rd Edition). John Wiley & Sons, Inc.: Hoboken, NJ. Chapters 4-5. **(Course Directory)**
- Review: Lampe, C., Vitak, J., Gray, R., Ellison, N. (2012). Perceptions of Facebook's value as an information source. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '12)*, Austin, TX, 3195-3204. **(ACM Digital Library)**

March 28: Qualitative Research: Approaches and Evaluation

- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* Thousand Oaks, CA: SAGE. (Ch. 9). **(Course Directory)**
- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Libraries Unlimited: Westport, CT. (Chs. 14-15).

March 30: Ethnography, Observation and Case Studies

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Libraries Unlimited: Westport, CT. (Chs. 7-8; 20-21).
- Harviainen, J. T. (2015). Information literacies of self-identified sadomasochists: An ethnographic case study. *Journal of Documentation, 71*(3), 423- 439.

April 4: One-on-One Interviews

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Libraries Unlimited: Westport, CT. (Chs. 23-24).
- Smith, J. A. (1995). Semi-structured interviewing and qualitative analysis (pgs. 1-27). In J. A. Smith, R. Harre, & L.V. Langenhove (Eds.) Rethinking Methods is Psychology. Sage Publications. **(UNC Database)**
- Connaway, L. S., Dickey, T. J., & Radford, M. L. (2011). "If it is too inconvenient I'm not going after it:" Convenience as a critical factor in information-seeking behaviors. *Library & Information Science Research, 33*, 179-190.

April 6: Focus Group Interviews

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Libraries Unlimited: Westport, CT. (Ch. 25).
- Review: Woelfer, J. P. & Hendry, D. G. (2012). Homeless young people on social network sites. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '12)*, Austin, TX, 2825-2834. **(ACM Digital Library)**
- **Due: Research Review 2**

April 11: Diaries

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science.* Libraries Unlimited: Westport, CT. (Ch. 22).
- Toms, E. G. & Duff, W. (2002). "I Spent 1 V2 Hours Sifting Through One Large Box... Diaries as Information Behavior of the Archives User: Lessons Learned. *Journal of the American Society for Information Science & Technology*, 53(14), 1232-1238.

April 13: Think-Aloud

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science.* Libraries Unlimited: Westport, CT. (Ch. 19).
- Review: Cockrell, B. J., & Jayne, E. Al. (2002). How do I find an article? Insights from a Web usability study. *Journal of Academic Librarianship, 28*(3), 122-132.

April 18: Qualitative Data Analysis

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science.* Libraries Unlimited: Westport, CT. (Ch. 30).
- Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, *13*(1), 3-21.

April 20: Qualitative Data Analysis

April 25: Ethics

- Neuman, W. L. (2005). *Social research methods: Qualitative and quantitative approaches (6th Edition)*. Allyn and Bacon Publishing (Ch. 5, pgs. 129-147). **(Course Directory)**
- Williams, P., Block, L. G., & Fitzsimons, G. J. (2006). Simply asking questions about health behaviors increases both healthy and unhealthy behaviors. *Social Influence, 1*(2), 117-127.

April 27: Review and Wrap-up

- Fidel, R. (2008). Are we there yet?: Mixed methods research in library and information science. *Library and Information Science Research, 30*, 265-272.
- **DUE: End of Term Meta-Reflection**

April 30-May 2: Final Exam