
INLS 581

Research Methods Overview

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.
- Help students gain an understanding of the concepts and terminology used in ILS research and of the methods used to perform this research.
- Acquaint students with different research specialties and approaches in ILS.
- Improve students' abilities to read and evaluate and appreciate research.
- Improve students' 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%), Research Reviews (20%), Mid-term Exam (25%) and Final Exam (25%).

Fall 2014

[Friday, 9:00-11:45 AM]

Manning Hall, RM 304

Instructor: Diane Kelly, Ph.D.

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Office: Manning Hall, RM 10

Office Hours: W 11-12; F 1-2

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 and 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

September 5, 2014

Research Review 1

October 12-20, 2014

Mid-term Exam

November 14, 2014

Research Review 2

December 8, 2014 (Monday, 8 AM)

Final Exam

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.' Your grade is based on several things: attendance, behavior, general participation, and reflective journaling.

- *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.* 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.
- *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.
- *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.*

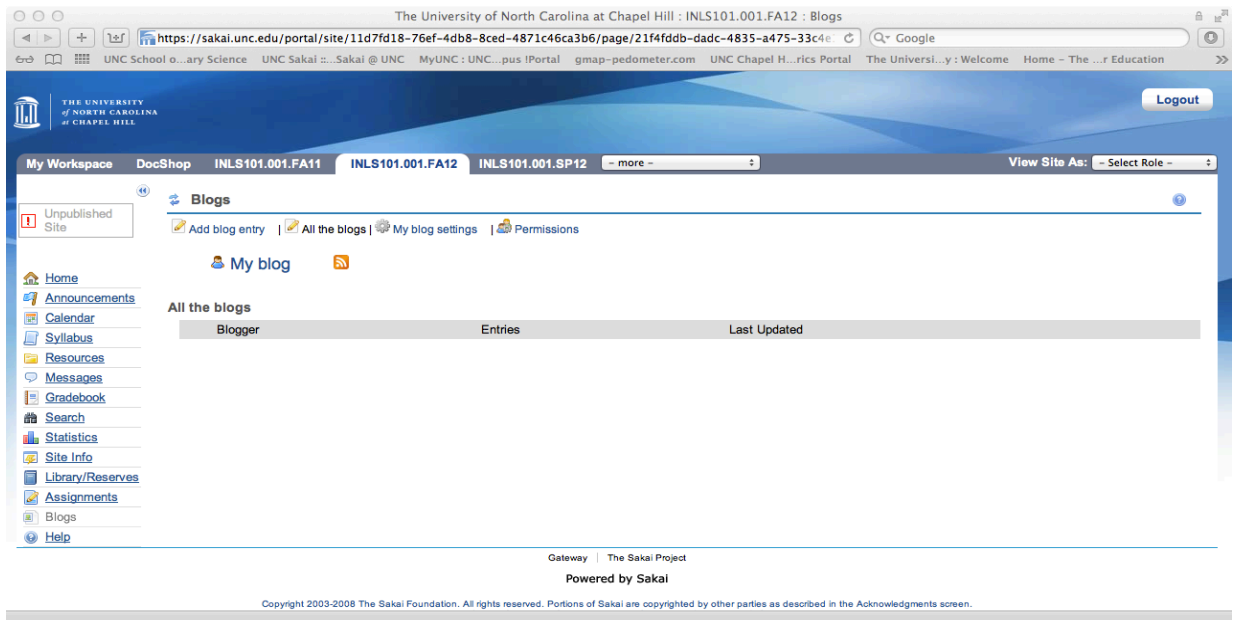
Each journal entry should contain two parts. The first part should be done after you have finished the readings, before you come to class (Pre-Class Reflection). The second part should be completed within 24 hours after class discussions (Post-Class Reflection). Use the template provided at the end of this syllabus to structure your entries. 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. These entries should be around 300-400 words.

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. Meta-reflections should be about 300-400 words.

See next page for instructions about how to post a private blog entry.

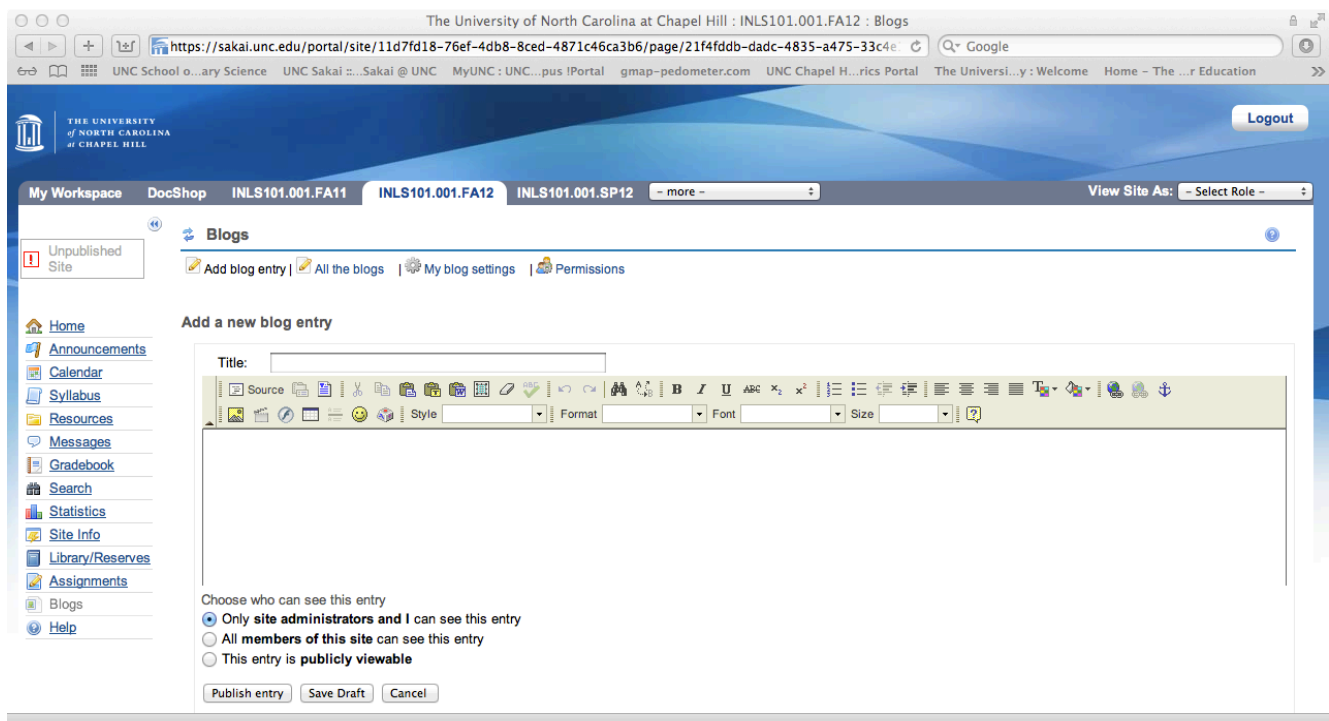
Start the week of September 05 with a Pre-Class Reflection.

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 administrator 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).



Research Reviews (20%)

You will conduct two research reviews. For each review, you should select two empirical research articles from the ILS literature to present, discuss and share in written format. Your review should be about 2 pages in length (single-spaced).

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.

Once you've done this, you should **upload your review** to the designated directory in Sakai (**name your file like this: `firstname_lastname`**) and **post a message** to the Discussion Board in Sakai with a **4-5 sentence summary** of each article (and full citation). During the course of the week following the due date of the review, you should **read and comment** on **two** other people's reviews (you are not required to read the papers these people reviewed). If someone asks you a question about your review, please respond. Pick reviews that discuss topics that interest you; it is okay if the review you want to read has already been read by many other people. Comment on the research presented in the review, not the quality of the review.

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 exam 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 it once you open it. The Final Exam will be administered during class. It will be the same format as the mid-term exam, but you will take it at the same time in a predetermined location since we have a 3-hour block of time reserved for this purpose.

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)

August 22: Introductions and Course Overview; Overview of Research; Research in Information and Library Science; Research Questions

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

August 29: No class: Diane in Germany

September 05: Theories and Models; Hypotheses and Variables

- 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.
- 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. **(UNC Journals)**
- 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.

Example

- Adler, R. F. & Benbunan-Fich, R. (2013). Self-interruptions in discretionary multitasking. *Computers in Human Behavior*, 29, 1441-1449. **(UNC Journals)**

- **Due: Research Review 1**

September 12: Measurement, Scale Construction, Descriptive Statistics (and Factor Analysis)

- Wildemuth, B. M. (2009). Applications of Social Research Methods to Questions in Information and Library Science. Libraries Unlimited: Westport, CT. [Chapter 27-28; 33-34; 36].
- Neuman, W. L. (2005). *Social research methods: Qualitative and quantitative approaches (6th Edition)*. Allyn and Bacon Publishing, pgs. 198-200: Levels of Measurement.
- 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. **(UNC Journals)**
- Sugimoto, C.R., Tsou, A., Naslund, S., Hauser, A., Brandon, M., Winter, D., Behles, C., & Finlay, S.C. (forthcoming). Beyond gatekeepers of knowledge: Scholarly communication practices of academic librarians and archivists at ARL institutions. *College & Research Libraries*. Pre-print: <http://ella.slis.indiana.edu/~sugimoto/preprints/Beyondgatekeepersofknowledge.pdf>.

September 19: Experiments and Usability Studies; T-tests and ANOVAs

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Information Today (Ch. 11-12; 37).
- Battleson, B., Booth, A. & Weintrop, J. (2001). Usability testing of an academic library website: A case study. *Journal of Academic Librarianship*, 27(3), 188-198. **(UNC Journals)**
- 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)**
- Shachaf, P., & Horowitz, S. (2006). Are virtual reference services color blind? *Library & Information Science Research*, 28(4), 501-520. **(UNC Journals)**

September 26: Log Analysis and Sampling for Extensive Studies

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Information Today (Ch. 18).
- Dumais, S., Jeffries, R., Russell, D. M., Tang, D. & Teevan, J. (2014). Understanding user behavior through log data and analysis. J.S. Olson and W. Kellogg (Eds.), *Human Computer Interaction Ways of Knowing*. New York: Springer.
- Taghavi, M., Patel, H., Schmidt, N. Wills, C., & Tew, Y. (2012). An analysis of web proxy logs with query distribution pattern approach for search engines. *Computer Standards & Interfaces*, 34, 162-170. **(UNC Journals)**

Sampling

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Information Today (Ch. 13).
- 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. **(UNC Journals)**

October 03: Bibliometrics; Research Synthesis and Meta-Analysis

- Osareh, F. (1996). Bibliometrics, citation analysis and co-citation analysis: A review of the literature I and II. *Libri*, 46, 149-158; 217-225.
- 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. **(UNC Journals)**
- Kelly, D. & Sugimoto, C. R. (2013). A systematic review of interactive information retrieval evaluation studies, 1967-2006. *Journal of the American Society for Information Science & Technology*, 64(4), 745-770. **(UNC Journals)**
- Hornbæk, K. (2006). Current practice in measuring usability: Challenges to usability studies and research. *International Journal of Human-Computer Studies*, 64, 79-102. **(UNC Journals)**

October 10: Catch-up; Review for Midterm

- **DUE: Mid-Term Meta-Reflection**
- **Mid-Term Open October 12-20**

October 17: Fall Break

October 24: Surveys and Sampling

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Information Today (Ch. 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 1-5.

October 31: Interviews; Sampling for Intensive Studies; Qualitative Data Analysis

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Information Today (Ch. 23-25; 14-15).
- 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 in Psychology*. Sage Publications. **(UNC Database)**
- Agosto, D. E. (2002). Bounded rationality and satisficing in young people's web-based decision making. *Journal of the American Society for Information Science & Technology*, 53(1), 16-27. **(UNC Journals)**
- 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. **(UNC Journals)**

November 07: Content and Collection Analyses; Qualitative Data Analysis

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Information Today (Ch. 29-30).
- 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>.

November 14: Diaries, Think-Aloud, and Observation; More Qualitative Data Analysis

- Wildemuth, B. M. (2009). *Applications of Social Research Methods to Questions in Information and Library Science*. Information Today (Ch. 8-9; 19-22).
- Capra, R., Chen, A. T., McArthur, E., & Davis, N. (2013). Searcher actions and strategies in asynchronous collaborative search. *Proceedings of the ASIST Conference*.
- Elswiler, D. & Ruthven, I. (2007). Towards task-based personal information management evaluations. *Proceedings of the Annual ACM International Conference on Research and Development in Information Retrieval (SIGIR '07)*, 23-30. **(ACM Digital Library)**
- Kumpulainen, S. & Jarvelin, K. (2010). Information interaction in molecular medicine: Integrated use of multiple channels. *Proceedings of Information Interaction in Context Conference (IliX '10)*, 95-104. **(ACM Digital Library)**
- **Due: Research Review 2**

November 21: Ethics; Review; Wrap-up

- Neuman, W. L. (2005). *Social research methods: Qualitative and quantitative approaches (6th Edition)*. Allyn and Bacon Publishing (Ch. 5, pgs. 129-147). **(Readings 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. **(Reading Directory)**
- **DUE: End of Term Meta-Reflection**

December 8: Final Exam: 8:00-11:00 AM

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?

What questions do you still have? Do you have any new questions?

What are some possible applications of this research or research method to the information professions?