INTRODUCTION
LIS 608, Research Methodology in LIS, focuses on common social science techniques, such as surveys and experiments, which lend themselves to quantitative analysis. Also included are lectures on qualitative methods, such as participant observation and historical research, and hybrid methods like focus groups, content analysis, and evaluation research. Studies of information usage are used as the main examples, and methods peculiar to information science, such as bibliometrics, are also examined. Note: This course comprises 40 hours of instruction, consisting of 20 hours of taped lectures, and 14 hours of online discussion and other activities.

Grading for the entire course will be based on:

<table>
<thead>
<tr>
<th>Exercises 1-2 (15% each)</th>
<th>30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments 1-2 (15% each)</td>
<td>30%</td>
</tr>
<tr>
<td>Online Quizzes 1-4 (5% each)</td>
<td>20%</td>
</tr>
<tr>
<td>Participation in BlackBoard discussions</td>
<td>20%</td>
</tr>
</tbody>
</table>

Assignments: All assignments are due when indicated. Up to five days extension may be granted for exceptional circumstances if requested in advance. All reading listed should be completed by the date indicated; when a reading has the notion “Discuss” before it, that means that you are to have read the item carefully and are prepared to discuss it. Please double-space and staple all papers; do not use report covers or list Social Security numbers on your papers.

One text is required for the course:


Other required readings are on Electronic Reserve or can be found in academic libraries.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topics and Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/9</td>
<td><strong>First week of Spring Semester.</strong> Logon to BlackBoard to introduce yourself, and to read the Introduction to course: content, schedule, assignments and grading. Read the text about Exercise 1 and the relevance of Spradley's chapters. Download the syllabus.</td>
</tr>
<tr>
<td></td>
<td><strong>Lecture 1</strong> A history of research in library and information science. Different ways of &quot;knowing.&quot; Human inquiry. The philosophy of science and social science. <strong>Read:</strong> Babbie, Chapter 1: Human Inquiry and Science.</td>
</tr>
<tr>
<td></td>
<td><strong>Lecture 3</strong> Theories, models, and hypotheses -- in general. Good theory: Gould's example. <strong>Read:</strong> Babbie, Chapter 2: Paradigms, Theory and Social Research.</td>
</tr>
<tr>
<td></td>
<td><strong>Lecture 5</strong> Principles of observation. Field research and participant observation. <strong>Read:</strong> Babbie, Chapter 10: Qualitative Field Research. Spradley, J. <em>Participant Observation</em>, Part Two, Steps One and Two (pp. 39-58 only).</td>
</tr>
<tr>
<td>1/27</td>
<td><strong>Due:</strong> Exercise One (Observation) on Sunday by 11PM.</td>
</tr>
<tr>
<td>2/3</td>
<td><strong>Take Quiz 1 by 11PM on this date.</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Lecture 7</strong> Conceptualization. Constructs. Indicators. Operationalizing variables. Quantification. Measurement quality. Reliability and validity. <strong>Read:</strong> Babbie, Chap. 5: Conceptualization, Operationalization &amp; Measurement, pp. 124-142 only.</td>
</tr>
<tr>
<td></td>
<td><strong>Lecture 9</strong> Sampling: Populations and frames. Sampling designs: simple random, systematic, stratified. <strong>Read:</strong> Babbie, Chapter 7: The Logic of Sampling.</td>
</tr>
<tr>
<td></td>
<td><strong>Lecture 10</strong> Conducting experiments. Independent and dependent variables. Threats to validity.</td>
</tr>
</tbody>
</table>
Controls and testing. Randomization and matching of subjects.

**Read**: Babbie, Chapter 8: Experiments.


**2/17**

**Assignment One (Nelson critique) Due.**

**2/24**

**Take Quiz 2 by Sunday at 11PM.**

**Lecture 11**

Survey research: overview. Question design and common problems.

**Read**: Babbie, Chapter 9, pages 253-274 only.


**Lecture 12**


**Read**: Babbie, Chapter 6: Indexes, Scales, and Typologies.

**Lecture 13**

Survey research: interviewing. Constructing interview schedules. Face-to-face interviews. Focus groups.

**Read**: Babbie, Chapter 9: Survey research, pages 274-288 only.

**3/10**

**Exercise Two (Questionnaire design) Due**

[March 11 – 17 is UK Spring Break Week]

**Lecture 14**

Unobtrusive methods. Studying existing records. Historical research.

**Read**: Babbie, Chapter 11: Unobtrusive research.


LECTURE H

History and examples of unobtrusive methods.
[View Richardson taped lecture on historical research.]


Lecture 15


3/31

Take Quiz 3 by this date, 11PM.

Lecture 16

Statistics and analysis techniques for one and two variables.

Read: Babbie, Chapter 14: Quantitative analyses.

Lecture 17

Statistics and analysis techniques for multiple variables.

Read: Babbie, Chapter 16: Social statistics.

Lecture 18

Ethical considerations in research. Writing research reports and articles.

Read: Babbie, Chap. 3: The Ethics and Politics of Social Research.

Lecture 19

Evaluating the research design and data analysis of published research. Summary.

Read: Babbie, Chap. 17: Reading and Writing Social Research.


4/21

Due: Assignment Two ("Open").

4/28

Take Quiz 4 by Sunday, 11PM.
The purpose of Exercise One is to give you experience in observing people. You are to pick a library setting, observe what goes on there, and describe the experience in a short paper. You might consider this as participant observation research, although the main point is simply to observe carefully. The basic steps are these:

1. Read the material from *Participant Observation* by Spradley and Babbie's chapter on "Field Research," for a little "how to do it" advice. (However, what you will do is a little different than what these two authors describe, since we are not "strangers" to the organization and setting that we'll observe.) Baker’s article on "Observation" may also help, but is more theoretical.

2. Find a library setting in which these conditions apply: a. you have access (i.e., you can legally be there without difficulty); b. there is an unobtrusive place and for you to sit; c. you will not disrupt or interfere with the work of others; d. you have a clear field of view (you can see without twisting and turning or looking around an obstruction); and e. where there is a flow of people and work. Some possible settings are:
   - reference desk or circulation desk areas.
   - periodical or reserve reading areas.
   - an area for online catalog terminals or Internet computers.

3. Pick a half-hour time period (a full 30 minutes) and sit there. Watch carefully what happens around you. Take notes, and mark times at which you make observations. E.g., "6:03. Tall man & small boy--> reference desk". Do not be so obvious about your observations that people feel that they are being watched. Make systematic observations about what you see. Try to look at the scene as a stranger -- someone who has arrived from a distant place and has never seen this situation before. I can't tell you exactly what to note (that is part of your task), but here are a few suggestions to get you started:
   - How many people pass through your field of view? What is the rate of flow -- is it a "busy" place? How would you describe the majority of people who pass by? What kinds of interactions take place? Describe individual eye and body movements, and vocalizations: conversations with others, or "talking out loud" to oneself. What kinds of roles do people play? Try to avoid preconceptions and common labels: Don't use titles (e.g., "librarian" and "patron") to describe roles, but rather describe what behaviors you see. What observable expressions are evoked in those people you see, e.g., satisfaction, frustration, happiness, etc.? Do you think people know or suspect that you are observing them? Finally, might there be a practical application of your study? E.g., Could the space or the service offered where you observed be improved to better serve the clients of that library?

4. This is the hard part! In three to four double-spaced pages, write a narrative that conveys the experience that you had (or reports the results of your observations). It is OK to be creative in your style, as long as you don't distort what actually happened. Indicate, either in the margin or in the text, the times that events happened; you may find the reporting easier if you begin each entry or paragraph with a time reference (e.g., "5:02 - 5:05: A group of three women stop at a desk across from the front door. A man and a woman sit behind the desk. The man greets the three women. . . ").
LIS 608 EXERCISE 2: SURVEY RESEARCH DESIGN

Design a questionnaire, for self-administration (e.g., through the mail). Guidelines:

• Choose a topic/problem of interest to you, about which you have considerable background knowledge. This could be done in conjunction with a specialization project, internship or job.

• Compose at least 20 discrete questions (i.e., screening and contingent questions don't count towards the total, although it is fine to include them). Do not simply create one question with 20 sub-parts using the same scale, but rather vary the types of questions and answers.

• Use a scale or multiple-choice format for as many items as possible. A few open ended questions are acceptable, if they are related to your other questions.

• Format the questions in ways that encourage understanding and completion of the questionnaire. Guard against possible misinterpretations of questions or instructions by the respondent: use clear, non-biased and (where possible) simple language.

• Make it as attractive as possible, e.g., in choice of typefaces, spacing, etc.

• Include a cover letter or statement explaining the survey’s purpose and encouraging a response. If the questionnaire is to be administered in-person (rather than through email or mail), include a statement to be read or heard by the respondent.
ASSIGNMENT 1: CONCEPTUAL AND OPERATIONAL DEFINITIONS


Answer the following questions in 6-9 typed, double-spaced pages. Indicate, in either the text or the margin of your paper, points where you address each of the questions.

1. What is Nelson attempting to study? Why do you think that he picked this particular topic for research? Consider his background, his occupation, and his conclusions.

2. What method did Nelson choose to conduct his investigation? Was it an appropriate method for this sort of topic? What other methods might he have used instead? (Note: In answering this question and the ones below, do not discuss the sampling of faculty or universities.)

3. How does Nelson define the concept of "communication" as it is used in his study? Does he define it in other words, e.g., quote a "dictionary definition" of the concept? Is Nelson's definition of communication the same one you would use if you were studying it in another setting, e.g., between shoppers and store clerks, or between an attorney and client?

4. How does Nelson operationalize the concept of "communication" as it is used in his study? That is, how does he say it should be measured, step-by-step? How does he determine whether "communication" has indeed taken place between faculty and librarians? Is it logical? What other factors remain unexplored in Nelson's discussion—e.g., about the knowledge and actions of either faculty or librarians?

5. Provide a better and more general nominal definition of "communication." That is, write one that does not apply only to "communication between faculty and librarians" but to communication among members of any groups. You might start with a dictionary definition. Do not try to incorporate the notions of "effectiveness" or "successful" into your definition of communication.

6. Starting with the definition you chose in answer to question 5, provide a better operational definition of "communication" between faculty and reference librarians. That is, say exactly how you would measure communication between those parties. Specify the procedures by which you would observe and record the measure, e.g., capturing the answer to a question, or preserving some other kind of evidence. Do not restrict your measure(s) to notions of "use" or "awareness."
ASSIGNMENT 2-A  (One Option):
Designing an Email Survey, Based on Interview Questions

Read this article: Dorothy McCaughan, Carl Thompson, Nicky Cullum, Trevor Sheldon and Pauline Raynor (2005). Nurse practitioner and practice nurses' use of research information in clinical decision making: findings from an exploratory study. Family Practice, 22(5), 490-497. Available: http://fampra.oxfordjournals.org/cgi/content/full/22/5/490

Extract (or intuit) at least twenty (20) of the questions or observations used in this study and modify them for administration by questionnaire rather than by interview. (Consider those questions with multiple parts as being separate questions.) Use a variety of question types, emphasizing those that you identify as being problematic. Try to use a forced- or multiple-choice format for most items (a few open-ended questions are fine if they relate to your other questions). Don’t forget to consider asking questions about the background of the respondent—e.g., their academic degrees or professional certifications.

Construct (a section of) a questionnaire with the items. Format the 20 questions in a way that will encourage understanding and completion of the form. Be careful about possible misinterpretations of the questions or instructions by the respondent: use clear, non-biased and (wherever possible) simple language. Keep in mind that the original investigators were able to probe deeply in their interviews and observations, and also to answer questions from respondents – so make your printed questions gather as much information as possible.

ASSIGNMENT 2-B  (Another Option):
Writing Your Own Research Proposal

GUIDELINES FOR RESEARCH PROPOSALS

Prepare a formal, typed proposal for a study that you (or an organization of which you are a member) may actually carry out. This should be original, and not based on earlier work for which you've received credit. Your proposal should contain the following items:

1. A statement of the topic, phrased as a research question.
2. A statement regarding why your topic is original and of interest to you.
3. A review describing at least five representative works in the research literature that are relevant to your topic. Describe any theory or model that is relevant to the subject.
4. A definition and explication of the important concepts in your study.
5. An explanation of your methods of investigation and your reasons for choosing them.
6. An description of the expected results (perhaps phrased as hypotheses) and the implications of possible findings.
7. A time schedule for the study (i.e., activities by month or week).
8. A budget (if appropriate).