INST 701-0101 Introduction to Research Methods

College of Information Studies, University of Maryland
Fall 2016
Wednesdays 6:00 to 8:45 PM
Hornbake Building (South Wing), Room 0115

Instructor:
Beth St. Jean, Assistant Professor
Hornbake Building, Room 4117K
College of Information Studies
University of Maryland, College Park
301-405-6573
bstjean@umd.edu

Office Hours: Wednesdays, 3:30 to 5:00 PM or by appointment

Course Description

In this survey course, we will examine the entire scope of the research process, beginning with reviewing the existing literature to identify significant gaps, coming up with novel and important research questions to investigate, and preparing a research proposal. We will then discuss many of the different data collection methods that information professionals and researchers use to investigate research questions, including interviews, focus groups, diaries, surveys, and experiments. Toward the end of the semester, we will cover the processes of writing up and presenting reports of completed research.

Learning Objectives

By the end of this course, students will be able to:

1. Come up with original research problems that are important to investigate;
2. Articulate research questions that are investigable and likely to lead to interesting and impactful findings;
3. Review the literature relevant to a particular research problem and identify gaps and potentially fruitful areas for future research;
4. Develop a suitable research design, selecting appropriate research method(s) and data collection and analysis techniques given the nature of the research problem and the specific research questions under investigation;
5. Carry out a research study, implementing appropriate data collection and data analysis techniques;
6. Prepare and present both research proposals and reports of completed research;
7. Demonstrate both an awareness of ethical concerns related to research studies and a commitment to protecting the rights and well-being of participants who volunteer for research studies.

Assigned Readings

There is one <u>required</u> textbook for this course:

 Pickard, A. J. (2013). *Research Methods in Information* (2nd ed.). Chicago, IL: Neal-Schuman. [ISBN: 978-1-55570-936-5].

 This book can be purchased through our University Book Center (http://umcp.bncollege.com/webapp/wcs/stores/servlet/RESEARCH%20METHODS%20IN%20INFORMATION/BNCB_TextbookDetailView?sectionId=&item=N&catalogId=10001&langId=-1&storeId=15551&productId=600005877967), through the American Library Association (ALA) Store (http://www.alastore.ala.org/detail.aspx?ID=4246), or through Amazon (https://www.amazon.com/Research-Methods-Information-Second-Pickard/dp/1555709362?ie=UTF8&ref_=asap_bc). Also, a copy of this book has been placed on reserve at McKeldin Library for your use.

There is also a <u>recommended</u> book for those of you who have a particular interest in HCI research methods:

 Lazar, J., Feng, J. H., & Hochheiser, H. (2010). *Research Methods in Human-Computer Interaction*. West Sussex, UK: John Wiley & Sons Ltd. [ISBN: 978-0-470-72337-1].

 This book can be purchased through our University Book Center (http://umcp.bncollege.com/webapp/wcs/stores/servlet/BNCB_TextbookDetailView?catalogId=10001&item=N&langId=-1&productId=600000601031&storeId=15551) or through Amazon (https://www.amazon.com/Research-Methods-Human-Computer-Interaction-Jonathan-ebook/dp/B00DWHNVFE/ref=dp_kinw_strp_1). Also, a copy of this book has been placed on reserve in McKeldin Library for your use.

Additional assigned readings are available through our class Canvas site.

The following books have been placed on reserve in McKeldin Library for your use:

 Babbie, E. (2010). *The Practice of Social Research* (12th ed.). Belmont, CA: Wadsworth.

 Booth, W. C., Colomb, G. G., & Williams, J. M. (2008). *The Craft of Research* (3rd ed.). Chicago, IL: The University of Chicago Press. [NOTE: This item is non-circulating, but it can be used at the library: UMCP McKeldin Library Reference Stacks: Q180.55.M4 B66 2008]

 Bryman, A. (2012). *Social Research Methods* (4th ed.). New York: Oxford University Press.

 Groves, R. M., Fowler, Jr., F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2009). *Survey Methodology* (2nd ed.). NJ: John Wiley & Sons, Inc.

 Hansen, D., Shneiderman, B., & Smith, M. A. (2011). *Analyzing social media networks with NodeXL: Insights from a connected world*. Boston, MA: Elsevier, Inc.

 Jones, W. P. & Kottler, J. A. (2006). *Understanding Research: Becoming a Competent and Critical Consumer.* NJ: Pearson Education, Inc.

 Krathwohl, D. R. (2009). *Methods of Educational and Social Science Research* (3rd ed.). Long Grove, IL: Waveland Press, Inc.

 Lazar, J., Feng, J. H., & Hochheiser, H. (2010). *Research Methods in Human-Computer Interaction*. West Sussex, UK: John Wiley & Sons Ltd.

 Pickard, A. J. (2013). *Research Methods in Information* (2nd ed.). Chicago, IL: Neal-Schuman.

 Weiss, R. S. (1994). *Learning from Strangers: The Art and Method of Qualitative Interview Studies*. New York: The Free Press.

Course Policies

Attendance
Students are expected to attend every class and to be on time. If you are unable to make a class, please e-mail me beforehand and check in with a fellow student following class so that you can catch up on anything you missed. Attendance will be taken at the beginning of each class session. Absences will only be excused in accordance with University policy (illness, religious observances, participation in University activities at the request of University authorities, and compelling circumstances beyond your control). Any planned absences due to religious observances must be communicated to me in writing during the first two weeks of class. Students may miss one class session with no penalty; thereafter, each unexcused absence will result in your grade being lowered by one step (for example, an A- will become a B+). Repeated tardiness may be considered an unexcused absence.

Course Participation
Students are expected to actively participate in every class. This will require that you finish all assigned readings prior to each class session. Participation forms an integral part of your own learning experience, as well as that of your classmates. Your participation in classroom discussions, as well as in your group projects throughout the semester, will count for 10% of your final grade. Classroom discussions should remain professional and respectful at all times.

Written Work
All written work should be proofread and revised as necessary before you submit it. Use Times New Roman 12-point font and one-inch margins. All documents should be single-spaced. Be sure to organize your papers, using section and subsection headings to identify portions of your work, and include your name on every page. Use APA Style for in-text citations and reference lists. There are many resources about APA style available on the Internet. See, for example, http://www.lib.umd.edu/tl/guides/citing-apa; https://owl.english.purdue.edu/owl/resource/560/01/; and http://www.apastyle.org/learn/faqs/index.aspx.

Submitting Assignments
Each assignment must be submitted before the beginning of class on the due date through our Canvas site ("INST701"). Please submit only one file per assignment (Word or pdf format for papers; PowerPoint for presentations), naming your file using the following convention: LastName_FirstName_Assignment#_Date (e.g. 'Smith_John_Assignment2_10122016').

Late Work
Unless you are facing an emergency situation AND you request an extension from me at least 48 hours in advance of the due date, late work will automatically be graded down by one step for each day that it is late. Assignments more than seven days late will not be accepted.

Academic Integrity
All assignments in this class must reflect your own original work. You must cite and properly attribute any material quoted or paraphrased from some other source. The University of Maryland, College Park has a nationally recognized Code of Academic Integrity administered by the Student Honor Council. This Code sets standards for academic integrity at the University of Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. For more information on the Code of Academic Integrity or the Student Honor Council, please visit www.shc.umd.edu. Please also read and adhere to the University of Maryland Code of Academic Integrity (http://www.president.umd.edu/policies/docs/III-100A.pdf). You may also find this Office of Student Conduct definition of academic dishonesty to be helpful: http://osc.umd.edu/OSC/AcademicDishonesty.aspx.

Emergency Preparedness

Please see the University's Emergency Preparedness Website (http://prepare.umd.edu/) for information about the current status of the campus. If a class session needs to be rescheduled, I will e-mail you as soon as possible.

Syllabus Change Policy

This syllabus is subject to change with advance notice. If a change becomes necessary, I will announce the change in class and e-mail all of you. The version posted on Canvas will always be the most up-to-date.

Student Course Evaluations (CourseEvalUM)

Toward the end of the semester, you will have an opportunity to evaluate this course. Your participation in these evaluations is integral to the success of our College. Your feedback will remain completely confidential and will be immensely valuable in improving our school's teaching effectiveness and learning environments. I will e-mail you to let you know when the course evaluation system will be available. At that time, please go to https://www.courseevalum.umd.edu/ to complete your evaluation of this course. If over 70% of the students in the class complete their evaluation, you will be able to access the aggregate results through Testudo (if you have completed all of your course evaluations).

Special Accommodations

If you need any accommodations due to a disability, please first register with the Disability Support Service (DSS) office (http://www.counseling.umd.edu/DSS/) and file any required documentation, and then see me as early as possible in the semester to let me know. We can then work with DSS to determine how to best accommodate your needs.

Learning Assistance Service

If you're experiencing difficulties in keeping up with the academic demands of this course, please consider contacting the Learning Assistance Service, 2202 Shoemaker Building, 301-314-7651 (http://www.counseling.umd.edu/LAS). Their educational counselors can help with time management, reading, math learning skills, note-taking and exam preparation skills. All of their services are free to UMD students.

Evaluation

Your final grade will be calculated based on the weighting of course assignments shown in the following table. Please note that revision and resubmission of assignments for the purpose of obtaining a higher grade will not be permitted. Also, you will not be allowed to drop any of these grades. All assignments must be submitted through our class Canvas site ('INST701') prior to the start of class on the due date indicated. Please note that your slides or any other electronic materials you've prepared for your final project presentation need to be uploaded to Canvas no later than noon on December 7th.

#	Assignment Description	Due Date	%
n/a	Class Participation	Every class meeting	10%
1	Research Method Presentation [Pairs]	Var. [Select topic: 9/14 in class]	15%
5-P	Final Project: Proposal [Team]	September 28, 2016	Check-off
5-AB	Final Project: Annotated Bibliography	October 19, 2016	10%
2	Questionnaire Design Problem Set [Individual]	October 26, 2016	10%
3	Statistics Problem Set [Individual]	November 9, 2016	10%
4	Qualitative Data Analysis Exercise [Individual]	November 30, 2016	10%
5-Pr	Final Project: Presentation [Team]	December 7, 2016 (noon)	15%
5-Pa	Final Project: Paper [Team]	December 14, 2016 (noon)	20%
5-Ev	Final Project: Self, Peer, & Team Evaluations [Individual]	December 16, 2016 (noon)	Check-off

Please see the last few pages of this syllabus for specific instructions regarding each of the assignments. The weighted average of your grades on all of the assignments (including your class participation grade) will be converted to a letter grade according to the following table:

Weighted Average	Letter Grade
97.0 and above	A+
94.0-96.9	A
90.0-93.9	A-
87.0-89.9	B+
84.0-86.9	B
80.0-83.9	B-
77.0-79.9	C+
74.0-76.9	C
70.0-73.9	C-
67.0-69.9	D+
64.0-66.9	D
60.0-63.9	D-
Below 60.0	F

Course Schedule

Part I: Introduction

Week 1 – August 31

Topic: Course Overview / Introduction to Research

Readings:

Pickard, A. J. (2013). Introduction. In *Research Methods in Information* (2nd ed., pp. xv-xxii). Chicago, IL: Neal-Schuman.

Pickard, A. J. (2013). Chapter 1: Major research paradigms. In *Research Methods in Information* (2nd ed., pp. 5-24). Chicago, IL: Neal-Schuman.

Bryman, A. (2012). Chapter 1: The nature and process of social research. In *Social Research Methods* (4th ed., pp. 3-17). New York: Oxford University Press.

Olson, J. (2009). "10 Questions."

BØdker, S., Hornbæk, K., Oulasvirta, A., & Reeves, S. (2016). Nine questions for HCI researcher in the making. *Interactions, 23*(4), 58-61. Available: http://interactions.acm.org/archive/view/july-august-2016/nine-questions-for-hci-researchers-in-the-making

Week 2 – September 7

*** Library Orientation with Tahirah Akbar-Williams, Education and Information Studies Librarian: Meet in McKeldin Library, Room 6107 ***

Topic: Reviewing the Literature; Identifying Research Problems

Readings:

Pickard, A. J. (2013). Chapter 2: Reviewing literature. In *Research Methods in Information* (2nd ed., pp. 25-38). Chicago, IL: Neal-Schuman.

Krathwohl, D. R. (2009). Chapter 5: Creating research problems. In *Methods of Educational and Social Science Research* (3rd ed., pp. 83-104). Long Grove, IL: Waveland Press, Inc.

Hernon, P. & Schwartz, C. (2007). What is a problem statement? *Library & Information Science Research, 29*(3), 307-309.

Week 3 – September 14

Activity: Select method for Assignment 1: Research Method Presentations

Topic: Defining and Proposing the Research

Readings:

Pickard, A. J. (2013). Chapter 3: Defining the research. In *Research Methods in Information* (2nd ed., pp. 39-48). Chicago, IL: Neal-Schuman.

Krathwohl, D. R. (2009). Chapter 2: The variety of research methods. In *Methods of Educational and Social Science Research* (3rd ed., pp. 25-34). Long Grove, IL: Waveland Press, Inc.

Pickard, A. J. (2013). Chapter 4: The research proposal. In *Research Methods in Information* (2nd ed., pp. 49-58). Chicago, IL: Neal-Schuman.

Booth, W. C., Colomb, G. G., & Williams, J. M. (2008). Chapter 2: Connecting with your reader: (Re-)Creating yourself and your readers. In *The Craft of Research* (3rd ed., pp. 16-27). Chicago, IL: The University of Chicago Press.

Recommended: Krathwohl, D. R. (2009). Chapter 1: Two research approaches from a continuum of approaches. In Methods of Educational and Social Science Research (3rd ed., pp. 3-23). Long Grove, IL: Waveland Press, Inc.

Week 4 – September 21

Topic: Sampling / Research Data Management / Ethics

Readings:

Pickard, A. J. (2013). Chapter 5: Sampling. In *Research Methods in Information* (2nd ed., pp. 59-69). Chicago, IL: Neal-Schuman.

Pickard, A. J. (2013). Chapter 6: Research Data Management. In *Research Methods in Information* (2nd ed., pp. 71-86). Chicago, IL: Neal-Schuman.

Pickard, A. J. (2013). Chapter 7: Ethics in research. In *Research Methods in Information* (2nd ed., pp. 87-96). Chicago, IL: Neal-Schuman.

Babbie, E. (2010). Chapter 3: The ethics and politics of social research. In *The Practice of Social Research* (12th ed., pp. 62-86). Belmont, CA: Wadsworth. [just read pages 62-77]

Part II: Research Methods

Week 5 – September 28

Topic: Case Studies / Surveys / Delphi Studies / Usability Testing

Readings:

Pickard, A. J. (2013). Chapter 8: Case studies. In *Research Methods in Information* (2nd ed., pp. 101-110). Chicago, IL: Neal-Schuman.

Pickard, A. J. (2013). Chapter 9: Surveys. In *Research Methods in Information* (2nd ed., pp. 111-118). Chicago, IL: Neal-Schuman.

Pickard, A. J. (2013). Chapter 13: Delphi studies. In *Research Methods in Information* (2nd ed., pp. 149-156). Chicago, IL: Neal-Schuman.

Pickard, A. J. (2013). Chapter 11: Usability testing. In *Research Methods in Information* (2nd ed., pp. 127-134). Chicago, IL: Neal-Schuman.

Lazar, J., Feng, J. H., & Hochheiser, H. (2010). Chapter 10: Usability testing. In *Research Methods in Human-Computer Interaction* (pp. 251-280). West Sussex, UK: John Wiley & Sons Ltd.

Assignment Due: 5-P. Final Project: Proposal

Week 6 – October 5

Topic: Experiments

Readings:

Pickard, A. J. (2013). Chapter 10: Experimental research. In *Research Methods in Information* (2nd ed., pp. 119-125). Chicago, IL: Neal-Schuman.

Krathwohl, D. R. (2004).Chapter 21: Experimentation and Experimental Design. In *Methods of Educational and Social Science Research: An Integrated Approach* (3rd ed., pp. 477-518). Long Grove, IL: Waveland Press, Inc.

Week 7 – October 12

Topic: Ethnography / Action Research / Historical Research

Readings:

Pickard, A. J. (2013). Chapter 12: Ethnography. In *Research Methods in Information* (2nd ed., pp. 135-147). Chicago, IL: Neal-Schuman.

Bell, G. (2001). Looking across the Atlantic: Using ethnographic methods to make sense of Europe. *Intel Technology Journal, Q3*, 1-10. Available: ftp://download.intel.com/technology/itj/q32001/pdf/art_1.pdf

Pettigrew, K. E. (1999). Waiting for chiropody: Contextual results from an ethnographic study of the information behaviour among attendees at community clinics. *Information Processing & Management, 35*(6)*,* 801-817.

Pickard, A. J. (2013). Chapter 14: Action research. In *Research Methods in Information* (2nd ed., pp. 157-166). Chicago, IL: Neal-Schuman.

Pickard, A. J. (2013). Chapter 15: Historical research. In *Research Methods in Information* (2nd ed., pp. 167-177). Chicago, IL: Neal-Schuman.

Part III: Data Collection and Data Analysis Techniques

Week 8 – October 19

Topic: Questionnaires / Diaries

Readings:

Pickard, A. J. (2013). Chapter 18: Questionnaires. In *Research Methods in Information* (2nd ed., pp. 207-224). Chicago, IL: Neal-Schuman.

Groves, R. M., Fowler, Jr., F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2009). Chapter 7: Questions and answers in surveys. In *Survey Methodology* (2nd ed., pp. 217-257). NJ: John Wiley & Sons, Inc.

Pickard, A. J. (2013). Chapter 20: Diaries. In *Research Methods in Information* (2nd ed., pp. 235-241). Chicago, IL: Neal-Schuman.

Assignment Due: 5-AB. Final Project: Annotated Bibliography

Week 9 – October 26

Topic: Quantitative Analysis

Readings:

Pickard, A. J. (2013). Chapter 24: Quantitative analysis. In *Research Methods in Information* (2nd ed., pp. 283-310). Chicago, IL: Neal-Schuman.

Lazar, J., Feng, J. H., & Hochheiser, H. (2010). Chapter 4: Statistical Analysis. In *Research Methods in Human-Computer Interaction* (pp. 69-97). West Sussex, UK: John Wiley & Sons Ltd.

Huff, D. (1993). Chapter 10: How to talk back to a statistic. In *How to Lie with Statistics* (pp. 124-144). New York, NY: W. W. Norton & Company.

Assignment Due: 2. Questionnaire Design Problem Set

Week 10 – November 2

Topic: Observation / Interviews / Focus Groups

Readings:

Pickard, A. J. (2013). Chapter 19: Observation. In *Research Methods in Information* (2nd ed., pp. 225-233). Chicago, IL: Neal-Schuman.

Pickard, A. J. (2013). Chapter 17: Interviews. In *Research Methods in Information* (2nd ed., pp. 195-206). Chicago, IL: Neal-Schuman.

Weiss, R. S. (1994). Chapter 4: Interviewing. In *Learning from Strangers: The Art and Method of Qualitative Interview Studies* (pp. 61-119). New York: The Free Press. [just read pages 61-83]

Pickard, A. J. (2013). Chapter 21: Focus groups. In *Research Methods in Information* (2nd ed., pp. 243-249). Chicago, IL: Neal-Schuman.

Week 11 – November 9

Topic: Qualitative Analysis / Grounded Theory

Readings:

Pickard, A. J. (2013). Chapter 16: Grounded theory: Method or analysis? In *Research Methods in Information* (2nd ed., pp. 179-187). Chicago, IL: Neal-Schuman.

Winkelman, W. J., Leonard, K. J., & Rossos, P. G. (2005). Patient-perceived usefulness of online electronic medical records: Employing grounded theory in the development of information and communication technologies for use by patients living with chronic illness. *Journal of the American Medical Informatics Association, 12*(3), 306-314.

Pickard, A. J. (2013). Chapter 23: Qualitative analysis. In *Research Methods in Information* (2nd ed., pp. 267-281). Chicago, IL: Neal-Schuman.

Clark, J. (2005). Constructing expertise: Inequality and the consequences of information-seeking by breast cancer patients. *Illness, Crisis & Loss, 13*(2), 169-185.

Assignment due: 3. Statistics Problem Set

Week 12 – November 16

Topic: Analysis of Other Types of Materials / Content Analysis / Log Analysis / Social Network Analysis

Readings:

Pickard, A. J. (2013). Chapter 22: Analysis of existing, externally created material. In *Research Methods in Information* (2nd ed., pp. 251-261). Chicago, IL: Neal-Schuman.

Baker, L. M. (2004). Information needs at the end of life: A content analysis of one person's story. *Journal of the Medical Library Association, 92*(1), 78-82.

Liu, Z. & Jansen, B. J. (2012). Almighty Twitter, what are people asking for? *Proceedings of the American Society for Information Science and Technology, 49*(1). Available: http://onlinelibrary.wiley.com/doi/10.1002/meet.14504901134/pdf

Hansen, D., Shneiderman, B., & Smith, M. A. (2011). Chapter 3: Social network analysis: Measuring, mapping, and modeling collections of connections. In *Analyzing social media networks with NodeXL: Insights from a connected world* (pp. 31-50). Boston, MA: Elsevier, Inc. **[See Electronic Reserves on our Canvas site to access this book]**

Thanksgiving Break – No class on November 23rd

Part IV: Presenting / Writing a Research Report

Week 13 – November 30

** Informal Discussion of Progress on Final Projects **

Topic: Writing / Presenting a Research Report

Readings:

Pickard, A. J. (2013). Chapter 25: Presenting the research. In *Research Methods in Information* (2nd ed., pp. 311-316). Chicago, IL: Neal-Schuman.

Bryman, A. (2012). Chapter 29: Writing up social research. In *Social Research Methods* (4th ed., pp. 683-708). New York: Oxford University Press.

Assignment Due: 4. Qualitative Data Analysis Exercise

Week 14 – December 7 – Final Project Presentations

** 5-Pr. Final Project Presentations (slides must be uploaded by noon on December 7th). **

** 5-Pa. Final Project Paper due by noon on Wednesday, December 14th. **

** 5-Ev. Final Project Self, Peer, and Team Evaluations due by noon on Friday, December 16th **

Assignment 1: Research Method Presentation [Pairs]

Due Dates:
   Selection of Method: Due September 14, 2016 (in class)
   Presentation: Variable dates (15%)

This assignment involves gathering in-depth information about a particular research method or data analysis technique, and presenting it to the class. During class on September 14th, I will pass around a sign-up sheet so that you and your partner can rank your preferred research methods. The table that I will pass around will look like the table below. I will ask you to fill in your column, placing a '1' in the row of your most preferred method, a '2' for your second choice method, and a '3' for your third-choice method.

Method	Week #	Student Pair 1	Student Pair 2	etc.
Case Studies	5			
Usability Testing	5			
Experiments	6			
Ethnography	7			
Action Research	7			
Questionnaires / Surveys	8			
Diaries	8			
Observation	10			
Interviewing	10			
Focus Groups	10			
Grounded Theory	11			
Content Analysis	12			
Log Analysis	12			
Social Network Analysis	12			
Other (see me by 9/13 to discuss)				

In order to prepare to present to the class regarding your particular method, please:

1. Carefully read all assigned readings that pertain to your selected method
2. Find one additional "how-to" article or book chapter that provides further detail regarding the method
3. Find at least two information-related studies that made use of this method
4. Prepare a 15-minute presentation that you will deliver during the relevant class session. In your presentation, please:
   a. Describe what you learned about the method (above and beyond what was covered in the assigned readings) (approximately 5 minutes)

b. Provide background information about the studies you have selected, describe how this method was implemented within the contexts of the studies, and briefly cover the major findings (approximately 4 minutes)
c. Critically appraise the researchers' implementation of this method and discuss any potential implications for the studies' findings (approximately 3 minutes)
d. Invite questions/comments and moderate classroom participation in this discussion (approximately 3 minutes)

Rubric:
I. About the Method (30 points)
- To what extent has the student pair presented information pertaining to their selected method that goes beyond that provided in the assigned readings?

II. About Two Studies that Used the Method (30 points)
- Has the student pair selected two information-related studies in which their selected method was implemented?
- Has the student pair provided background information about each study?
- Has the student pair discussed how the method was implemented within the contexts of both studies?
- Has the student pair described the major findings from each study?

III. Student Viewpoints (20 points)
- Has the student pair clearly presented and explained their viewpoints about how the researchers involved in both studies had implemented the method?
- Has the student pair described the potential implications of the method (as implemented) for each study's findings?

IV. Presentation Quality (20 points)
- Was the student pair's presentation well-organized and clearly delivered?
- Did the student pair keep their presentation to the time allotted? How well did they make use of the allotted time?
- To what extent was the student pair able to stimulate and manage classroom discussion?
- How well did the student pair field questions from the audience?

Assignment 2: Questionnaire Design Problem Set [Individual]

Due Date: October 26, 2016 (10%)

Evaluate each of the following survey questions, as well as the associated response options. If there are problems/concerns with a question or its response options, explain the problems with reference to our course readings (appropriately cited in APA format). Also, propose an improved question and response options, with an explanation of why they would (a) make it easier for the respondent to reply and (b) lead to more accurate answers. Your response for each question should be in narrative form, and approximately 150 to 200 words.

1. Do you think that Internet users should use Google to perform their searches and carefully evaluate the credibility of each search result that is returned?   YES   NO

2. Don't you think that Google is the best search engine?   YES   NO

3. How do you feel about using the Internet?   I LOVE IT   I HATE IT

4. What was your household income last year? $_____

5. How many computers do you own at home?   1   2   3   4

6. Rank the usefulness of each of the following 50 types of information resources.

7. Please indicate all of the following that you have ever used to try to find information:

   ○ Blog   ○ Wiki   ○ Social Networking Site   ○ Forum   ○ YouTube

8. How likely would you be to steal from a department store if you were sure that no one was watching?

1	2	3	4	5	6	7
Not at						Extremely
all likely						likely

9. When did you graduate from college? _____

10. For how many years have you been using the Internet?   A FEW   SOME   MANY

Rubric:
Each of the above questions is worth 10 points. Your answers will be graded based upon their accuracy, clarity, use of appropriate terminology and references to our assigned readings, and creativity in suggesting alternate wordings.

Assignment 3: Statistics Problem Set [Individual]

Due Date: November 9, 2016 (10%)

1. Using the following list of respondent ages, determine the range and calculate the mean, median, and mode.

21	25	54
32	71	62
19	34	85
69	29	37

2. What is the standard deviation associated with the mean you calculated in question 1 above? What is the variance?

3. Create a pie chart that shows the distribution of your respondents by age range (i.e., 20-29, 30-39, etc.).

4. You are wondering whether age is associated with average hours of Internet use. Calculate the Pearson correlation coefficient for the following data and determine whether it is statistically significant. Report your results using APA format. [Ex. (r(32) = .36, p < .05)]

#	Age	Average Hours of Internet Use per Day
1	21	6.3
2	32	5.8
3	19	6.5
4	69	2.3
5	25	6.0
6	71	1.8
7	34	6.2
8	29	4.3
9	54	3.2
10	62	2.4
11	85	4.9
12	37	7.0

5. Use the data for question 4 above to create a scatterplot. Add a linear trendline, displaying the equation and the R^2 value of this line on your chart. What does this R^2 value mean?

6. Using the data in the table below, run an independent-samples t-test to determine whether there is a statistically significant difference between men and women in regard to average hours of Internet use per day. Calculate the effect size using Cohen's D. Report the results of your calculations using APA format. [Ex. The differences between the ratings given by men (*M* = 12.53, *SD* = 2.14) and the ratings given by women (*M* = 8.42, *SD* = 1.95) were statistically significant (*t*(31) = 2.35, *p* < .001, *d* = .41)]

#	Gender	Average Hours of Internet Use per Day
1	M	6.3
2	M	5.8
3	F	6.5
4	M	2.3
5	F	6.0
6	F	1.8
7	M	6.2
8	M	4.3
9	M	3.2
10	F	2.4
11	F	4.9
12	M	7.0

7. Run cross-tabulations for the following data and run a Chi-square test for independence. Calculate the effect size using Cramer's V. Display your cross-tabulations, as well as the results of your Chi-square test. The latter should be reported in APA format [Ex. χ^2 (12, *N* = 3,038) = 23.21, *p* = .026, Cramer's *V* = .05].

#	Educational Attainment	Trust toward Information from the Internet
1	1	7
2	3	5
3	2	6
4	5	2
5	4	1
6	2	7
7	5	1
8	4	2
9	1	6
10	3	4
11	4	3
12	2	6

Keys:

Educational Attainment: 1 = Less than high school; 2 = High school graduate; 3 = Some college;
                              4 = College graduate; 5 = Some graduate work and up.

Trust: 1 = Not at all; 4 = Somewhat; 7 = Very much.

8. Construct a histogram that shows the number of respondents who fall into each of the educational attainment categories.

9. Run a linear regression to determine whether a person's educational attainment level can be used to accurately predict his/her trust toward information from the Internet. Display the data on a scatterplot, showing the equation and R^2-value of the linear regression line. Report your results using APA format. [Ex. A person's educational attainment significantly predicted his/her trust toward information from the Internet, β = .437, t(30) = 2.75, $p < .01$. Educational attainment also explained a significant proportion of the variance in trust scores, R^2 = .19, F(1, 32) = 7.54, $p < .01$.]

10. What type of data (i.e., nominal, ordinal, interval, or ratio) is each of the following:

    a. Subject number (as depicted in question 4)
    b. Age (in years)
    c. Average hours of Internet use per day (as depicted in question 4)
    d. Gender (as depicted in question 6)
    e. Educational attainment (as depicted in question 7)
    f. Trust toward information from the Internet (as depicted in question 7)
    g. Temperature (in Fahrenheit)
    h. Average household income (in dollars)
    i. Time of day (on a 12-hour clock)
    j. Time of day (on a 24-hour clock)

Rubric:
Each of the above questions is worth 10 points. Please show your work, as applicable. Your answers will be graded based upon their accuracy and the clarity of your thought process.

Assignment 4: Qualitative Data Analysis Exercise [Individual]

Due Date: November 30, 2016 (10%)

For this assignment, you will use the file called "Assignment4_Interview_Excerpts" posted in the "Assignments" section of our Canvas site. This file contains passages from my interviews with people who have type 2 diabetes. All of these passages pertain to the interview question: "What kinds of things have motivated you to learn about diabetes?"

Read through the passages and identify themes that seem to recur across multiple interviewees. For example, maybe several interviewees said that they are motivated to learn about diabetes because they want to be able to help other people who have it. Make a coding dictionary, listing each of the themes you've identified. For each theme:
   a. Provide a brief name for the theme
   b. Define/describe the theme
   c. Provide at least two sample quotes from the transcripts (be sure to label these quotes with the interviewee/interview number (e.g., 'I01_FU'))
   d. List all of the interview transcripts (e.g., 'I01_FU') in which you have found evidence of the theme

Also, prepare a 1- to 2-page (single-spaced) write-up, describing:
   a. How you went about identifying themes across the interviews for this assignment;
   b. Whether/why you would go about this a different way in the future;
   c. Whether/how the things you have learned from these interviewees would influence the ways in which you might try to motivate a family member or friend who had been recently diagnosed with diabetes.

Submit both your coding dictionary and your write-up, preferably together in one Word or pdf file.

Rubric:
   * Has the student identified at least 5 themes that recur across at least 2 interviewees? Do these themes fit with the data? (20 points)
   * Has the student selected a short name for each theme and provided a definition/description of the theme? (15 points)
   * Has the student provided 1 to 2 quotes that exemplify each theme? Has the student indicated the transcript from which each quote was taken? (15 points)
   * Does the student's write-up provide a clear description about how he/she went about identifying themes across the interviews? (25 points)
   * Does the student's write-up explain how he/she might approach this task differently in the future? (15 points)
   * Has the student discussed whether/how the things he/she has learned from the interviewees might influence the ways in which he/she might try to motivate a family member or friend who had been recently diagnosed with diabetes? Do these implications clearly arise from the data? (10 points)

Assignment 5: Final Project [Team]

Due Dates:
   5-P. Proposal: Due September 28, 2016 (check-off)
   5-AB. Annotated Bibliography: Due October 19, 2016 (10%)
   5-Pr. Presentation: Due by noon on December 7, 2016 (15%)
   5-Pa. Paper: Due by noon on Wednesday, December 14, 2016 (20%)
   5-Ev. Self, Peer, and Team Evaluations: Due by noon on Friday, December 16, 2016 (check-off)

Your final project for this course will be a research proposal. Form a team of three students and select any information-related topic you wish. Once you have selected a topic, locate and read at least 12 articles that present results from related empirical studies. The goal of reading through these studies is to identify any gaps and to come up with a novel research problem so that you can propose your own research investigation.

By September 28th, you will need to submit a very brief **proposal** (approximately 1 page, plus an additional page for your references) in which you indicate your selected topic and your reason(s) for choosing to focus on this topic. Your proposal also needs to include references (formatted using APA style) for at least 12 articles that discuss related empirical studies that have been conducted. These articles should be ones that you are planning to read and use for your final project.

By October 19th, you will need to submit an **annotated bibliography** covering at least 12 articles. For each article, provide a citation in APA style, a brief summary, and a critical appraisal. Be sure to explain how each paper is relevant to your final project. This paper should be approximately 6 pages long (approximately one-half page for each article you discuss).

Both your **presentation** and your **paper** need to include the following sections:
1. Introduction: What is your selected topic? Why did you select this topic?
2. Literature Review: What empirical investigations have already been conducted in this area? What were the findings from these studies? What gap(s) did you identify in your review of the literature? Your discussion should draw on at least 10 articles. [For your paper, be sure to add a References section on the last page. Citations should be in APA-style.]
3. Proposed Research Problem and Research Questions: What is the novel research problem you are proposing to investigate? What are the specific research questions you wish to address? [Propose at least two research questions]
4. Proposed Methodology: How do you propose to go about finding out the answers to these questions? Why are you proposing to use the particular methods you have chosen? Why are they particularly well-suited to your research questions? What are the advantages and disadvantages of each of these methods, alone and in combination with one another? Be sure to cover your planned methods for participant recruitment, data collection, and data analysis in your discussion.
5. Potential Significance and Impact: What is the potential significance and impact of working on the research problem you have identified and of knowing the answers to your proposed research questions?

Your team will have 15 minutes for your **presentation**. Please plan to talk for approximately 12 minutes and to field questions from the audience for the remaining 3 minutes. Please keep in mind that these are to be delivered as professional presentations.

Your **final paper** should be 10 to 12 pages (single-spaced). As you will have some time to work on your paper following your presentation, please be sure to consider incorporating any feedback you receive from me and/or from your fellow students at your presentation.

Proposal (Check-off)
- Has the team described their selected topic and their reason for selecting this topic?
- Has the team included references (formatted in APA style) for at least 12 articles that discuss related empirical studies that have been conducted?

Annotated Bibliography (10%)
- Has the team provided annotations for at least 12 articles that report results from relevant empirical studies? (20 points)
- Has the team provided a citation in APA style for each article? (10 points)
- Has the team provided an adequate summary of each article? (30 points)
- Has the team critically evaluated each article? (30 points)
- Has the team described how each of the articles is relevant to their final project? (10 points)

Presentation (15%)
- **Introduction:** Did the team introduce their topic and explain why they selected this particular topic? (10 points)
- **Literature Review:** Did the team discuss some of the literature that described results from relevant empirical studies? Was there evidence that the team had synthesized the various articles that they read for this assignment? (25 points)
- **Proposed Research Questions:** Did the team propose at least two research questions that were not already addressed in their selected articles? (10 points)
- **Proposed Methodology:** Did the team describe the specific methods (including participant recruitment, data collection, and data analysis methods) they propose to use in order to investigate these research questions? Did they explain their reasoning for selecting these methods and discuss why they are particularly well-suited to their research questions? Did the team discuss the advantages and disadvantages of each of the methods they intend to use? (25 points)
- **Potential Impact:** Did the team discuss the significance and potential impact of working on the research problem they identified and of finding out the answers to their proposed research questions? (20 points)
- **Presentation Quality:** Was the team's presentation well-organized and clearly delivered? Did all team members participate? Did the team keep their presentation to the time allotted? How well did the students field questions from the audience? (10 points)

Paper (20%)
- **Introduction:** Has the team described their topic and explained their reasoning for selecting this particular topic? (10 points)
- **Literature Review:** Did the team include a synthesized discussion of some of the literature that has reported empirical results relevant to this topic? Has the team referenced at least 10

articles? Has the team included a References section in which they have provided APA-style citations for all of these articles? (25 points)

- **Proposed Research Questions:** Did the team propose at least two research questions that were not already addressed in their selected articles? (10 points)
- **Proposed Methodology:** Did the team describe the specific methods (including participant recruitment, data collection, and data analysis methods) they propose to use to investigate these research questions? Did the team provide a rationale for selecting these particular methods and describe why they are particularly well-suited to their research questions? Has the team discussed the advantages and disadvantages of each of the methods they intend to use? (25 points)
- **Potential Impact:** Did the team discuss the significance and potential impact of investigating the research problem that they have identified and of finding out the answers to their proposed research questions? (20 points)
- **Writing Quality:** Is the team's writing clear, organized, and easy-to-understand? (10 points)

Self, Peer, and Team Evaluations (check-off)

Each student will submit a 1-page paper evaluating their own contributions to the project, as well as that of each of their peers. Please also evaluate the performance of your team as a whole. What did you learn? How well did you work together?

These evaluations will be taken into consideration when grading the various elements of this assignment.