
INST 701-0101 Introduction to Research Methods

College of Information Studies, University of Maryland
Spring 2014
Mondays 6:00 to 8:45 PM
Hornbake Building, Room 4113

Instructor:

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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 methods that information scientists 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. Identify original research problems that are important to investigate
2. Articulate research questions that are investigable and likely to lead to interesting and important 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 an awareness of ethical concerns related to research studies and exhibit a commitment to protecting the rights and well-being of participants who volunteer for research studies

Assigned Reading

There is one required textbook for this course:

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

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.

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. (2004). *Survey Methodology*. 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. (1995). *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; failure to comply will have an impact on your grade. If you are unable to make a class, 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.

Class 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 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/ues/guides/citing-apa> 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. Please submit only one file per assignment (Word or pdf format for papers; PowerPoint for presentations), naming your file with your last name and the due date (e.g., Follman 3.15.14).

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 quotes 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://www.umd.edu/emergencypreparedness/>) 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 (Tuesday, April 29th through Friday, May 14th), you will have an opportunity to evaluate this course. Your participation in these evaluations is integral to the success of our school. Your feedback will remain completely confidential and will be immensely valuable in improving our school's teaching effectiveness and learning environments. Beginning April 29th, please go to <https://www.courseevalum.umd.edu/> to complete your evaluation of this course.

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.

| # | Assignment Description | Due Date | % |
|------|---------------------------------------|---------------------|-----------|
| n/a | Class Participation | Every class meeting | 10% |
| 1 | Research Method Presentation | Variable | 15% |
| 5-P | Final Project: Proposal | February 24, 2014 | Check-off |
| 5-AB | Final Project: Annotated Bibliography | March 24, 2014 | 10% |
| 2 | Questionnaire Design Problem Set | March 31, 2014 | 10% |
| 3 | Statistics Problem Set | April 14, 2014 | 10% |
| 4 | Qualitative Data Analysis Exercise | April 28, 2014 | 10% |
| 5-Pr | Final Project: Presentation | May 12, 2014 (noon) | 15% |
| 5-Pa | Final Project: Paper | May 15, 2014 (noon) | 20% |

Course Schedule

Part I: Introduction

Week 1 – January 27

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.

Week 2 – February 3

****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 – February 10

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 – February 17

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 – February 24

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 – March 3

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 – March 10

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.

Week 8 – March 17 – Spring Break

Part III: Data Collection and Data Analysis Techniques

Week 9 – March 24

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. (2004). Chapter 7: Questions and answers in surveys. In *Survey Methodology* (pp. 201-240). 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 10 – March 31

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.

Assignment Due: 2. Questionnaire Design Problem Set

Week 11 – April 7

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. (1995). 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 12 – April 14

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 13 – April 21

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.

Part IV: Presenting / Writing a Research Report

Week 14 – April 28

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 15 – May 5

**** Informal Discussion of Progress on Final Projects ****

Topic: Meta-Analysis / TBD

Readings:

Ankem, K. (2005). Approaches to meta-analysis: A guide for LIS researchers. *Library & Information Science Research*, 27(2), 164-176.

Ankem, K. (2006). Use of information sources by cancer patients: Results of a systematic review of the research literature. *Information Research*, 11(3), paper 254. Available: <http://informationr.net/ir/11-3/paper254.html>

Week 16 – May 12 – Final Project Presentations

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

**** 5-Pa. Final Project Paper due by noon on May 15. ****

Assignment 1: Research Method Presentation

Due Dates:

Selection of Method: Due February 10, 2014 (check-off)

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 February 10th, we will pass around a sign-up sheet so that you can rank your preferred research methods. The table that we will pass around will look like the table below. We will ask you to fill in your column, placing a '1' in the column for your most preferred method, a '2' for your second choice method, and a '3' for your third-choice method.

| Method | Student 1 | Student 2 | Etc. |
|-----------------------------------|-----------|-----------|------|
| Questionnaires / Surveys | | | |
| Diaries | | | |
| Experiments: Lab | | | |
| Experiments: Field | | | |
| Observation | | | |
| Interviewing | | | |
| Focus Groups | | | |
| Case Studies | | | |
| Usability Testing | | | |
| Meta-Analysis | | | |
| Content Analysis | | | |
| Log Analysis | | | |
| Social Network Analysis | | | |
| Grounded Theory | | | |
| Other (see me by 2/17 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 one information-related study that makes 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 study you have selected, describe how this method was implemented within the context of the study, 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 study's findings (approximately 3 minutes)
- d. Invite and moderate classroom participation in this discussion (approximately 3 minutes)

Rubric:

I. About the Method (30 points)

- To what extent has the student presented information pertaining to his/her selected method that goes beyond that provided in the assigned readings?

II. About a Study that Uses the Method (30 points)

- Has the student selected an information-related study in which their selected method has been implemented?
- Has the student provided background information about this study?
- Has the student discussed how the method was implemented within the context of this study?
- Has the student described the major findings from the study?

III. Student Viewpoints (20 points)

- Has the student clearly presented and explained his/her viewpoints about how the researcher(s) have implemented the method?
- Has the student described the potential implications of the method (as implemented) for the study's findings?

IV. Presentation Quality (20 points)

- Was the student's presentation well-organized and clearly delivered?
- Did the student keep his/her presentation to the time allotted? How well did he/she make use of the allotted time?
- To what extent was the student able to stimulate and manage classroom discussion?
- How well did the student field questions from the audience?

Assignment 3: Statistics Problem Set

Due Date: April 14, 2014 (10%)

- 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 |

- What is the standard deviation associated with the mean you calculated in question 1 above? What is the variance?
- Create a pie chart that shows the distribution of your respondents by age range (i.e., 20's, 30's, etc.).
- 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 |

- 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?
- 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 acceptable APA format [Ex. $\chi^2(12, N = 3,038) = 23.21, p = .026, \text{Cramer's } V = .05$].

| # | 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 |

Key: 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; 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. Satisfaction with getting one's diabetes-related questions answered significantly predicted optimism scores, $B = .437, t(30) = 2.75, p < .01$. Satisfaction with getting one's questions answered also explained a significant proportion of the variance in optimism scores, $R^2 = .19, F(1, 32) = 7.54, p < .01$.]

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

- a. Subject number
- b. Age
- c. Average hours of Internet use per day (as depicted in question 4)
- d. Educational attainment (as depicted in question 7)
- e. Trust toward information from the Internet (as depicted in question 7)

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

Due Date: April 28, 2014 (10%)

For this assignment, you will use the file called “Interview Excerpts” posted on 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 do you feel are the three most important things someone needs to know in order to be able to successfully manage their diabetes?”

Read through the passages and identify themes that seem to recur across multiple interviewees. For example, maybe several people said that people with diabetes need to know about nutrition. 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 one or two sample quotes from the transcripts (be sure to label these quotes with the interviewee 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

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 what you might tell a friend or family member who has recently been 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? (10 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? (10 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 information that he/she would give to someone who has recently been diagnosed with diabetes? (20 points)

Assignment 5: Final Project

Due Dates:

- 5-P.** Proposal: Due February 24, 2014 (check-off)
- 5-AB.** Annotated Bibliography: Due March 24, 2014 (10%)
- 5-Pr.** Presentation: Due by noon on May 12, 2014 (15%)
- 5-Pa.** Paper: Due by noon on May 15, 2014 (20%)

Your final project for this course will be a research proposal. You may pick any information-related topic you wish. Once you have selected a topic, locate and read at least 6 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 February 24th, 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 for at least 6 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 March 24th, you will need to submit an **annotated bibliography**. For each article you will be using for your final project, 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 3- to 5 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 6 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? 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?

You 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 5 to 6 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 student described his/her selected topic and his/her reason for selecting this topic?
- Has the student included references for at least 6 articles that discuss related empirical studies that have been conducted?

Annotated Bibliography (10%)

- Has the student provided annotations for at least 6 articles that report results from relevant empirical studies? (20 points)
- Has the student provided a citation in APA style for each article? (10 points)
- Has the student provided an adequate summary of each article? (30 points)
- Has the student critically evaluated each article? (30 points)
- Has the student described how each of the articles is relevant to his/her final project? (10 points)

Presentation (15%)

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

Paper (20%)

- **Introduction:** Has the student described his/her topic and explained his/her reasoning for selecting this particular topic? (10 points)
- **Literature Review:** Did the student include a synthesized discussion of some of the literature that has reported empirical results relevant to this topic? Has he/she referenced at least 6 articles? Has the student included a References section in which he/she has provided APA-style citations for all of these articles? (25 points)

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