

Course Syllabus: SI 840: Research Methods

Instructors: Paul Edwards and Erin Krupka

Meets: Thursdays 12:30-3:30

Office hours:

Course overview

The intellectual agenda of the School of Information draws upon many referent disciplines. Thus, students doing research that is at the intersection of disciplines require a foundation and fluency in the **nature of knowledge** and the **methods of knowing**. To this end, this course explores what constitutes knowledge, what it means to know something and the conventions that have been adopted in the social sciences as methods of knowing.

Learning Objectives

1. Be able to **evaluate** whether and how a particular qualitative or quantitative method is appropriate to address research question (for own research)
2. Be an informed member of an interdisciplinary community, able to **articulate** the key ideas or approaches of the method.
3. Be able to **identify knowledge claims** and **identify how warrants for those claims operate** in the disciplines we cover.
4. **Statistical concepts:** Regression, Mean, Variance, standard deviation, Regression to the mean, causality, sampling, The method of least squares, significance level, the Normal distribution, uncertainty.
5. **Other concepts:** Philosophy (Okasha): induction, deduction, covering law, falsification, theory, model, paradigm (including breakdown into elements: theory, instruments, practices, journals, professional societies, technical terms, etc.), theory-ladenness of data, inference to best explanation (IBE), Booth: claim, warrant, reason, evidence, acknowledgement, reply; Latour: emic vs. etic (analyst vs. actor categories),

Books to order

- Theodore Porter, *Trust in Numbers*
- Booth, *Craft of Research*
- Okasha, Samir, *Philosophy of Science: A Very Short Introduction*

Overview Course Assignments and Exams:

Assignment	Due Date	Percent of Grade
Reading and Topic Generation	Jan. 26th	15%
Discussion Leader	TBA	10%
Weekly # writing on readings	Feb. 1st, wed. weekly thereafter until Mar. 30	10%
Pre-cand. Lit. Review	Feb. 9th	
Pre-cand. Introduction	Feb. 23rd	
Pre-cand. Research Design	Mar. 23rd	50%
Statistics Problem Set	Mar. 9th	
Observational Study	Mar. 16th	
Project I	Ap. 6th + time in class	
Project II	Ap. 13th + time in class	
Final Paper	Ap. 20th	15%

More detail on course assignments:

HW - Jan. 26th: Reading and topic generation

Due: Jan. 26th in class (week 4).

With a partner (we'll assign the pairings), you will create a reading assignment for one session. Your goal is to find 3 articles or book chapters that treat identical (or closely related) topics, but using different approaches (methods, theories, scientific paradigms). Each should contain a fully articulated discussion of the methods used to obtain and analyze data. (Note that in the case of ethnographic, historical, or other genres of interpretivist work, the term "data" may not occur; instead, authors may discuss interactions, documentary evidence, participant observations, and/or other kinds of evidence in support of claims.) *Ideally, one of the three papers should be a "hybrid" that uses multiple methods.* We will illustrate this by example, starting in Week 4.

This is not a simple task. You will need to triangulate between a topic of interest to you and your partner, and the availability of excellent research papers on that topic. It may be easiest to start

with one paper on which you both agree, then seek others on that topic, rather than define a topic first and then seek papers. We expect you to consult with your advisors, and potentially with other SI faculty, to seek out the best possible materials. We may reject one or more of your suggestions, and/or propose alternatives.

Criteria for including an article/chapter:

- Addresses a topic that is significant for information studies
- Authors are reputable, experienced researchers
- Contains a well-articulated methods section (this may not always be spelled out as such) that discusses how evidence was collected, how it was analyzed
- Reaches significant conclusions or findings
- Need not be recent, but if it is older, it should still have relevance to current research
- Papers you have already read, including in SI 701, are fair game, but your session should also include at least one paper neither of you have yet read

Steps:

- 1) Negotiate a session date with your partner. Sign up for that date on the SignupGenius.
- 2) Discuss possible topics with your partner, bouncing back and forth between articles that might serve your purpose and potential topic areas. You may find it easier to define a topic by choosing a great paper than to collect great papers that address your preferred topic.
- 3) Once you have settled on 1-3 potential topics, consult with your advisor about excellent papers with good, well-explained methods components. You can also consult with Paul and Erin, or with any other SI faculty who might be helpful. This is a great opportunity for first interactions with faculty you don't know yet. We have notified everyone to expect this.
- 4) Send the papers to Paul and Erin along with a cover letter (1-2 pages per article). This cover letter will ultimately be distributed to your classmates. It should *briefly answer the following with quotes (where we ask for them) or your own words (where we ask for them) and page numbers and highlighted text on the document*:
 - a) Find the statements in the paper that say what
 - i) General topic they are studying,
 - ii) The specific behavior or activity they are studying
 - iii) What the specific research question(s) are - here we are looking for you to find the specific formulation of the research question in the paper. This is a quote or set of quotes and NOT your own re-statement of them.
 - iv) What challenges do they face
 - b) the paradigm that the RQ is being asked in,
 - c) Then use Booth to identify
 - i) the claim (specific, significant),
 - ii) the reasons and/or evidence,
 - iii) the warrant
 - iv) the acknowledgement, and the reply

- d) State the major conclusion that the paper claims to draw. That is find what the authors say they believe they have shown not your own restatement of this. We are looking for quotes here.
- 5) Paul and Erin may reject one or more of the papers, or propose alternatives. We will also add one paper to your list.
- 6) On the session date, you'll do a short presentation to the class (Assignment #2). We'll demonstrate the format for the presentation ourselves.

Examples of some topic spaces

Here are some examples of topics that have been treated in multiple scientific paradigms. You could pick from here or use these as inspiration to come up with your own.

- Explaining technological change: economics, sociology, history, science and technology studies (STS)
- How can social capital be measured (or otherwise operationalized)?
- Assessing the credibility of online news / Assessing information credibility without authoritative sources
- Validating quality in large-scale digitization
- Are MOOCs a pathway to social advancement (e.g. employment) for low-income populations?
- What are the conditions for the emergence of virtual organizations in long-tail sciences?
- What is the impact of social networks on student engagement and learning?
- What is the impact of information technology adoption and use on hospital or health system performance? (A similar question could be applied to almost any large organization or social system.)

HW - In class: Discussion leaders

Due: Jan. 26th (Week 4).

You and your partner will have one of these in the semester. You will present for 15-20 minutes, right away at the beginning of class. The goals of the presentation:

- A **high-level** view of methods and data sources in each paper

- **Compare/contrast:** what does each method allow you to know? What kinds of questions can they **not** answer? The acknowledgement/response elements of each paper give some clues to this. For example, in the Qiu et al paper, outliers (such as students who scored very well in courses but did little work, as measured by the clickstream data) were interviewed [**different method**] to determine why; those students usually turned out to be people who had already taken related or identical courses in other environments.

- Discussion questions for the class

HW - weekly on wed. class: weekly writing

Due: before class, first one due on Feb 1st.

The course is reading and writing intensive. We are surveying many methods. The critique of readings is due by 9am on Thursday so that we have time to read it before class. The critique should contain 600-800 words on the readings assigned for that week. Which papers you critique depends on your group assignment:

If you see * and NO color highlight then this is a paper that we want everyone to only read (usually these are the statistics or methods companion pieces)

If you see * and color highlight then this is a paper that we want everyone to critique (usually these are the research papers)

If you see ^ then if you are in groups 1-4 you will critique that as your 2nd paper

If you see ~ then if you are in groups 5-7 you will critique that as your 2nd paper

Here is what your critique should look like for each of the two papers: You should answer each of these questions for each paper.

- How do the authors formulate their question? (Write the RQ as the authors state)
- What is the way of knowing:
 - What is the evidence - what kinds of “things” count as evidence (observation, measurement, pictures...)
 - What is the design for their “evidence collection / data generation”
 - How do they collect evidence?
 - What sorts of instruments do they use (including things like surveys and other social science data-collecting tools)? (Short answer)
- What is the method of knowing?
 - What type of analysis do they do? (Here we are looking for the statistics or other formal analysis done on the data).
 - Reflection on what this method allows the researcher to conclude. What is included? What is left out?
 - How might a method/approach from a different paradigm address the same problem? (medium: 200-400 words)
- Who cares? (If explicit - Who do the authors say should care; if implicit - who do you think reads this?)
 - Could reference Journals, audience, wider uptake in your response (short, not comprehensive)

Pre-Candidacy Proposal Assignments:

Furthermore, this course is coupled with your pre-candidacy proposal. Therefore, you should to be able to do the list below. When you turn in a component of your

pre-candidacy proposal, turn it in together with the previous components. For late submissions, one point is deducted for every 24 hours after the deadline.

1. Define an interesting and do-able research topic and defend why it matters;
2. Conduct a literature search and write a literature review that situates the research question within a field of scholarly inquiry;
3. Design a study, using one or more research methods, that could answer the research Question.

HW - Feb. 9th: Pre-candidacy Literature Review

- From the handbook: "Proposals include a substantial literature review section which is comparable in scope and level of detail to the review included in the final paper." Now in this assignment you should be working toward this final product. It is okay if you do not have it to this level for this assignment. Here is what we will use as grading guidelines:
 - The main point of the literature review should be to set your paper off against the 2 or 3 closest current papers, and to give proper credit to other related papers that deserve priority for things that might otherwise seem new in your paper.
 - So..with that in mind, DO have a decent selection of papers (while we are not looking for a comprehensive review, we would like to see that you have more than a handful to work with).
 - Because it is hard for your reader to understand how your paper is different from others', given that they don't understand your paper yet, and most readers will not have read the other papers, take one or two sentences at the beginning of this review to state what research question you are going to pursue in your pre-cand. Proposal. That will set up the review. In particular
 - Answer as best you can: "What is the problem you are trying to solve or question you are trying to answer?"
 - Helpful hint:
 - Be generous in your citations. You do not have to say that everyone else did it all wrong for your approach and improvements to be interesting.
 - You should have notes, either on index cards or in les on your computer, on the books and articles you have read. Read over your summaries and comments and begin to look for common themes that can organize your review. What is the main point of the article, and how does it relate to your topic? Do other authors offer a similar position? An opposing one?
 - As you think through these questions, keep in mind that the literature review has two functions. The first is to demonstrate your familiarity with scholarly work on your topic to provide a survey of what you have read, trace the development of important themes and draw out any tensions in prior research. The second function is to lay the foundations for your paper, to provide motivation. The particular issues you intend to raise, the terms you will employ and the approach you will take should be dened

with reference to previous scholarly works. By drawing on such sources, you can find sanction for your own approach and invoke the authority of those who have written on the topic before you.

HW - Feb. 23rd: Pre-candidacy Introduction

- The introduction should start with what you do in this paper, the major contribution. You must explain that contribution so that people can understand it. Don't just state your conclusion: "My results show that the pecking-order theory is rejected." Give the fact behind that result. "In a regression of x on y , controlling for z , the coefficient is q ."
 - Answer as best you can: "What is the problem you are trying to solve or question you are trying to answer?"
- The first sentence is the hardest. Do not start with philosophy, "Financial economists have long wondered if markets are efficient." Do not start with "The finance literature has long been interested in x ." You might start by answering
 - "Why or how is this problem or RQ important, on scholarly and/or practical grounds?"
- Articulate what you believe your central contribution is/will be when you finish the project..
- 2 pages is a good upper limit for the introduction.
- Helpful tips: the intro is the place to lay out explicitly
 - The question you are trying to address (stating the hypothesis to be tested directly is a good way to do this)
 - Why we should care about this question (Is it an unproven theoretical result? An important policy question? Why should we care? This is not the place to do a long literature review. If, e.g., there has been a debate in the literature about this question, just briefly describe the uncertainty. For example, you may want to point out the range of previous results.
 - A good idea is to surprise or puzzle the reader's intuition in this section so that he or she would be curious to read the rest of the paper. People are naturally curious. If you can invoke the curiosity of the reader with a puzzle in your introduction, it will make for a much more engaging reading.
 - Be sure to state in that section what your contribution is? How are you answering the question?
 - You should state whether you are testing a model, evaluating a program or a change in policy, and what data you are using (but only in a preview fashion!).
 - What are/do you expect (for the purposes of this assignment) your main results? Explain briefly how your findings (might) differ from previous work and what the implications of these findings are.

HW - Mar. 23rd: Pre-candidacy Research Design / Methods

- For this assignment describe in detail how you will go about answering your question, and why the methods and data you are using helps you answer that particular question. This is the area where you decide what data you will use and why: are you going to use historical data, or contemporary data, or design your own experiment, This is also where you decide whether you will use statistics, quantitative or graphical analysis, or more qualitative data analysis. What you tell your readers about your data will depend in large part on the kind of analysis you are conducting. Generally speaking, however, your design section should do at least the following.
 - Describe the data you will use
 - Identify the data source. This means a sentence that explicitly says where your data come from (e.g., “This study uses data from the 1999 wave of the Panel Study of Income Dynamics.”)
 - How you obtain the data you will use
 - Describe the data source. You should tell your readers such things as the number of observations (you plan to collect), the population groups sampled, the time period during which the data were (will be) collected, and a detailed description of the method of data collection in some cases (eg. experiments or surveys or re-worked data).,
 - what variables it includes,
 - other characteristics of interest.
- Helpful hints
 - The best way to learn about writing a data section is to read several data sections in the literature on your topic and pay attention to the kinds of information they contain.
 - Most data sections are short—a page or so.
- Note any features of the data that may affect your results. Were certain populations overrepresented or underrepresented? Is there attrition bias or selection bias? Did the method of data collection change? Explain any computations or adjustments you made. Sometimes, a data source does not give you something directly; you perhaps had to add/subtract/multiply/divide two given pieces of data to get a third. Describe how you constructed your sample. Did you have to eliminate certain kinds of observations, for instance?

HW - Ap. 20th: Pre-candidacy Final Paper

As a final assignment, you will write a 12-15 page paper laying out a research design for your precandidacy project using one or more methods discussed in class. The paper should have the following sections:

- (a) Introduction;
- (b) Literature review;

- (c) Research Design;
- (d) Hypotheses or anticipated findings
- (e) Preliminary Results (if you have any)
- (f) Tentative Conclusions (if applicable)

HW - Ap. 6th: Project I

in the final two weeks of the course you will do two project activities. Project I asks you to take a paper that you are using in your pre-candidacy paper. You will answer these questions about that document.

- How do the authors formulate their question? (Write the RQ as the authors state)
- What is the way of knowing:
 - What is the evidence - what kinds of “things” count as evidence (observation, measurement, pictures...)
 - What is the design for their “evidence collection / data generation”
 - How do they collect evidence?
 - What sorts of instruments do they use (including things like surveys and other social science data-collecting tools)? (Short answer)
- What is the method of knowing?
 - What type of analysis do they do? (Here we are looking for the statistics or other formal analysis done on the data).
 - Reflection on what this method allows the researcher to conclude. What is included? What is left out?
 - How might a method/approach from a different paradigm address the same problem? (medium: 200-400 words)
- Who cares? (If explicit - Who do the authors say should care; if implicit - who do you think reads this?)
 - Could reference Journals, audience, wider uptake in your response (short, not comprehensive)

HW - Ap. 13th: Project II

Project II asks you to take your own pre-candidacy paper (or design for it). You will answer these questions about that document.

- How do the authors formulate their question? (Write the RQ as the authors state)
- What is the way of knowing:
 - What is the evidence - what kinds of “things” count as evidence (observation, measurement, pictures...)
 - What is the design for their “evidence collection / data generation”
 - How do they collect evidence?
 - What sorts of instruments do they use (including things like surveys and other social science data-collecting tools)? (Short answer)
- What is the method of knowing?

- What type of analysis do they do? (Here we are looking for the statistics or other formal analysis done on the data).
- Reflection on what this method allows the researcher to conclude. What is included? What is left out?
- How might a method/approach from a different paradigm address the same problem? (medium: 200-400 words)
- Who cares? (If explicit - Who do the authors say should care; if implicit - who do you think reads this?)
 - Could reference Journals, audience, wider uptake in your response (short, not comprehensive)

Weekly Layout of the course

Week 1 (Jan. 5) - Intro and ways of knowing

Pre-Read due on first day

- *Okasha, Chapters 1-3;
- *Porter, Chapters 1-4

Week 2 (Jan 12) - Intro the social nature of science

HW - Jan. 12th: UNGRADED: "self identified paradigm affiliation note card"

Read (90 pages in total)

- *Okasha chapter 5
- *Kuhn outline chapters 2 and 13.
- *Porter chapters 8-9
- *Burke, chapter 2

HW detail: after completing the readings in Okasha and Kuhn, write a short "paradigm affiliation note card" for yourself and your research, insofar as you have a clear idea of that at this point. Submit on canvas AND bring one hard copy to class. This should include:

- A principle theory (or theories) or model you use
- Instruments (can include social science "instruments" such as surveys or interviews)
- Significant work practices (single investigator vs. team; archival conferences vs. journal publishing; observational data vs. self-report vs. "found" data; how you formulate questions, what methods you use to answer those questions, and what broad justifications are made with regard to the area's relevance) ,
- Major journals or archival conference proceedings (just a couple will do)
- Professional societies
- Key technical terms in your paradigm

This need not be written out in complete sentences — a bullet list will do.

Week 3 (Jan. 19) - Wrapping up ways of knowing -> methods of knowing

Read (103 pages in total)

- *Latour ppg 1-62
- *Booth et al. chapt 7-11
- *Burke, pp. 11-49

Week 4 (Jan. 26) - Theory I: Non-Mathematical

Discussion leaders: Paul and Erin

HW - Jan. 26th: Reading and topic generation due before class

Read:

- *Beenen et al. (2004) "Using social psychology to motivate contributions to online communities"
- *Erickson & Kellogg (2003) "Social translucence: using minimalist visualisations of social activity to support collective interaction"
- *Karau & Williams (1993) "Social loafing: A meta-analytic review and theoretical integration"

Week 5 (Feb. 2) - Experiment Lab / non-parametric measures of association

Discussion leaders: Paul and Erin

Note: Starting this week we will use group numbers to divide readings. Group numbers: (1) Rasha and Lia, (2) Elizabeth and Brad, (3) Heeryung and Jeremy, (4) Carl and Jiaqi, (5) Harman and Zhewei, (6) Ernest and Allison, (7) Danaja and Mohamed

Readings (everyone read *, groups 1-4 read ^, groups 5-7 read ~, others are optional):

- *Davis, D. D., & Holt, C. A. (1993). Experimental economics: Methods, problems, and promise. *Estudios Economicos*, 179-212.
- *Friedman and Sunder. A primer for Economists. Pages 1-29.
- ^Berg, Joyce, John Dickhaut and Kevin McCabe. Trust, Reciprocity, and Social History, *Games and Economic Behavior*, Volume 10, Issue 1, July 1995, Pages 122-142,
- ~Bolton, Greiner and Ockenfels. Engineering Trust: Reciprocity in the Production of Reputation Information, *Management Science* 59 (2), 2013, pages 265-285.
- (suggested) Gergle and Tan, *Experimental Research in HCI*, 2014.

Week 6 (Feb. 9) - Experiment or Happenstance Field / OLS Regression I

Discussion leaders: Carl and Jaigi (please only cover the research papers)

NOTE: If you are not a discussion leader, then your critique is due this week. Only critique those items with a * and highlight or with a ~ and highlight or with a ^ and highlight.

Read:

- *Gujarati, D. N. (2009). *Basic econometrics*. Tata McGraw-Hill Education. chapters intro-1 (we will read 2 later even though it is in the PDF).
- *Qiu, J., Tang, J., Liu, T. X., Gong, J., Zhang, C., Zhang, Q., & Xue, Y. (2016, February). Modeling and predicting learning behavior in MOOCs. In *Proceedings of the Ninth ACM International Conference on Web Search and Data Mining* (pp. 93-102). ACM.
- ^Beheshitha, S. S., Hatala, M., Gašević, D., & Joksimović, S. (2016, April). The role of achievement goal orientations when studying effect of learning analytics visualizations. In *Proceedings of the Sixth International Conference on Learning Analytics & Knowledge* (pp. 54-63). ACM.
- ~Sinha, T., Jermann, P., Li, N., & Dillenbourg, P. (2014). Your click decides your fate: Inferring information processing and attrition behavior from MOOC video clickstream interactions. *arXiv preprint arXiv:1407.7131*.
- (suggested) Harrison, G. W., & List, J. A. (2004). Field experiments. *Journal of Economic literature*, 42(4), 1009-1055.

Week 7 (Feb. 16) - Experiment or Happenstance field / Regression II and Simulation

Discussion leaders: Danaja and Mohamed (please only cover the research papers)

Read:

- *Gujarati, D. N. (2009). *Basic econometrics*. Tata McGraw-Hill Education. chapter 2
- ~Centola, D. (2010). The spread of behavior in an online social network experiment. *Science*, 329(5996), 1194-1197.
- ^Adamic, L. (2015, February). The Diffusion of Support in an Online Social Movement: Evidence from the Adoption of Equal-Sign Profile Pictures. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing* (pp. 1741-1750). ACM.
- (Suggested) Banerjee, A., Chandrasekhar, A. G., Duflo, E., & Jackson, M. O. (2013). The diffusion of microfinance. *Science*, 341(6144), 1236498.

Week 8 (Feb. 23) - Survey (cross sectional) / factor analysis

Discussion leaders: Rasha and Lia (please only cover the research papers)

Read:

- *Müller, H., Sedley, A., & Ferrall-Nunge, E. (2014). Survey research in HCI. In *Ways of Knowing in HCI* (pp. 229-266). Springer New York.
- *Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage. chapter 17 (closely through section 17.4.2 and then skim other stuff. Again closely section 17.7).
- ^Leonardi, P. M., & Meyer, S. R. (2015). Social media as social lubricant: How ambient awareness eases knowledge transfer. *American Behavioral Scientist*, 59(1), 10-34.

- ~Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook “friends:” Social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168.
- (Suggested) Hofmann, S., Beverungen, D., Räckers, M., & Becker, J. (2013). What makes local governments’ online communications successful? Insights from a multi-method analysis of Facebook. *Government Information Quarterly*, 30(4), 387-396.
- (Suggested) Guo, C., & Saxton, G. D. (2014). Tweeting social change: How social media are changing nonprofit advocacy. *Nonprofit and Voluntary Sector Quarterly*, 43(1), 57-79.

Week 9 (Mar. 9) - Text Analysis

Discussion leaders: Allison and Earnest (please only cover the research papers)

Read:

- *Miles, M. B., Huberman, A. M., & Saldana, J. (2014) ~ . Chapter 4: Fundamentals of qualitative data analysis. *Qualitative data analysis: a methods sourcebook* (3rd ed., pp. 69-104). Thousand Oaks: Sage. (forthcoming)
- *Charmaz, K. (2006). Coding in grounded theory practice. *Constructing grounded theory: a practical guide through qualitative analysis* (pp. 42-71). London: Sage
- *Savolainen, R. (2008). Autonomous, controlled and half-hearted. Unemployed people’s motivations to seek information about jobs. *Information Research*, 13(4).
- (Suggested) Saldana, J. (2013) ~ . Chapter 1: An Introduction to Codes and Coding and Chapter 2: Writing Analytic Memos. *The coding manual for qualitative researchers*. Los Angeles: Sage. (pp.1-44)
- (Suggested) Liu, S., Huang, J. L., & Wang, M. (2014). Effectiveness of job search interventions: A meta-analytic review. *Psychological bulletin*, 140(4), 1009.
- (Suggested) Jansen, B. J., Jansen, K. J., & Spink, A. (2005). Using the web to look for work: Implications for online job seeking and recruiting. *Internet research*, 15(1), 49-66.

Week 10 (Mar. 16) - Survey (cross sectional) and Happenstance Field / selection bias

Discussion leaders: Zhewei and Harman (please only cover the research papers)

Watch first:

- <https://www.youtube.com/watch?v=p52Nep7CBdQ>

Read:

- *Heckman, J. J. (1977). Sample selection bias as a specification error (with an application to the estimation of labor supply functions). (extremely challenging)
- *Marsden, P. V., & Hurlbert, J. S. (1988). Social resources and mobility outcomes: A replication and extension. *Social forces*, 1038-1059.
- ~Gilbert, E., & Karahalios, K. (2009, April). Predicting tie strength with social media. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 211-220). ACM

- ^Jeon, G. Y., Kim, Y. M., & Chen, Y. (2010, April). Re-examining price as a predictor of answer quality in an online Q&A site. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 325-328). ACM.
- (Suggested) Harper, F. M., Raban, D., Rafaeli, S., & Konstan, J. A. (2008, April). Predictors of answer quality in online Q&A sites. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 865-874). ACM.
- (Suggested) Marsden, P. V., & Campbell, K. E. (1984). Measuring tie strength. *Soc. F.*, 63, 482.
- (Suggested) Haythornthwaite, C. (2002). Strong, weak, and latent ties and the impact of new media. *The information society*, 18(5), 385-401.

Week 11 (Mar. 23) - Interpretivist - ethnography

Discussion leaders: Elizabeth and Bradley

Read:

- *Paul Dourish (2014) "Reading and Interpreting Ethnography," in J. Olson & W. Kellogg, eds, *Ways of Knowing in HCI*, 1-24
- *Janet Vertesi (2012) "Seeing like a Rover: Visualization, embodiment, and interaction on the Mars Exploration Rover Mission," *Social Studies of Science* 42:3, 393-414
- *Lee, D. T., Kleinman, J., & Kleinman, A. (2007). Rethinking depression: an ethnographic study of the experiences of depression among Chinese. *Harvard Review of Psychiatry*, 15(1), 1-8.
- ^Nguyen, T., Phung, D., Dao, B., Venkatesh, S., & Berk, M. (2014). Affective and content analysis of online depression communities. *IEEE Transactions on Affective Computing*, 5(3), 217-226.
- ~Amanda Williams, Silvia Lindtner, Ken Anderson, and Paul Dourish. 2013. "Multisited Design: An Analytical Lens for transnational HCI," *Journal of Human-Computer Interaction* 29:1, 78-108.

Week 12 (Mar. 30) - Mixed Methods

Discussion leaders: Heeryung and Jeremy (please cover only the research papers)

Read:

- *Guo, P. J., Kim, J., & Rubin, R. (2014, March). How video production affects student engagement: An empirical study of MOOC videos. In *Proceedings of the first ACM conference on Learning@ scale conference* (pp. 41-50). ACM.
- *Kizilcec, R. F., & Halawa, S. (2015, March). Attrition and achievement gaps in online learning. In *Proceedings of the Second (2015) ACM Conference on Learning@ Scale* (pp. 57-66). ACM.
- *Zheng, S., Rosson, M. B., Shih, P. C., & Carroll, J. M. (2015, February). Understanding student motivation, behaviors and perceptions in MOOCs. In *Proceedings of the 18th ACM conference on computer supported cooperative work & social computing* (pp. 1882-1895). ACM.

Week 13 (Ap. 6) - Project I

Discussion leaders: NA

Week 14 -(Ap. 13) - Project II

Discussion leaders: NA

Week 15 (Ap. 20) - Wrap Up

Discussion leaders: NA