Course Syllabus

SI 840: Research Methods, v2.0

Instructors: Paul Edwards and Erin Krupka

Meets: Thursday 12:30-3:30 (note unusual time slot), 2245 North Quad
Office hours: Edwards, M 3-4 and Th 11-12

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.

Required books (please buy these):


Week 1, January 5: How do we know? Part 1

NB, please read these items before our first class session. No writing assignment is due, but our discussion will be much richer if everyone is prepared.

Readings:

- *Okasha, Chapters 1-3
- *Porter, Chapters 1-4. NB, in Chapters 3 and 4, Porter occasionally goes into extended narratives about historical episodes. The details of these are not important for our work; focus on the conceptual framework he develops.

Week 2, January 12, How do we know? Part 2

Readings (read in the following order):

- *Okasha, Chapter 5
- *Frank Pajares, synopsis of Thomas Kuhn, The Structure of Scientific Revolutions (https://www.uky.edu/~eushe2/Pajares/kuhnsyn.html), (1962). This isn't long, but because it's a synopsis of a book, the text is very rich. Please read slowly and carefully. Pajares also has an outline version (https://www.uky.edu/~eushe2/Pajares/Kuhn.html) of the same synopsis. Some readers may find it useful to bounce back and forth between the synopsis and the outline.
- *Porter, Chapters 8-9
- *Burke, Peter. A Social History of Knowledge II: From the Encyclopaedia to Wikipedia (London: Polity, 2012), Chapter 2. The purpose of this reading is to gain a fast, high-level view of the many different modes of analyzing knowledge and their historical origins. Details of the history are not important.

Week 3, January 19, How do we know? Part 3
Readings (read in the following order):

- "Booth et al., Section 3, "Making an Argument," pp. 105-172

The purpose of this reading is to gain a fast, high-level view of the many different modes of collecting information as input to C knowledge. Details of the history are not important.

Week 4, January 26, Social loafing

Readings:

- "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, February 2, Laboratory experiments

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):

- "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,
- Optional for all: Gergle and Tan, Experimental Research in HCI, 2014

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

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

Reminder: 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 ch. 2 later — ignore it for now, even though it is in the PDF).
- "Sinha, T., Jermann, P., Li, N., & Dillenbourg, P. (2014). Your click decides your fate: Inferring information processing and

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

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

Read (this week, read all three highlighted papers and the * book chapter, but write your assignment only about the * research paper and the one corresponding to your group. ^ groups 1-4; ~ groups 5-7.)

* Gujarati, D. N. (2009). Basic econometrics. Tata McGraw-Hill Education. Chapter 2 (last part of the PDF from Week 6.)

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

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

Read (this week everyone should read all the readings)

* Booth et al., The Craft of Research, chapters 3-4. Read first — this may help you with your Intro/Abstract assignment.
* 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).

Week 9 (Mar. 9) - Interview and text analysis / grounded theory methods

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

Read (this week everyone should read all the readings):

* Charmaz, K. (2006). Coding in grounded theory practice, ch. 3 of Constructing grounded theory: a practical guide through qualitative analysis. London: Sage, 42-71. We're reading this to get a sense of the actual practice of coding (described in Muller, above). You can read it lightly.


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

*Note about homework for this date: follow the usual weekly assignment format, but add one bullet point to your discussion. For each paper, determine whether sample selection bias might be present. Describe what that selection bias might be, and a statistical procedure (technique) or a new data collection procedure (instrument) you could use to remedy it.*

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

Watch first:

- Selection Bias: A Real World Example (https://www.youtube.com/watch?v=p52Nep7CBdQ)

**Read:**

*Heckman, J. J. (1979). Sample selection bias as a specification error (extremely challenging)


**Week 11 (Mar. 23) - Interpretivist - ethnography**

**Discussion leaders: Elizabeth and Bradley (please cover only the research papers)**

**Read (this week everyone should read all the readings):**


https://umich.instructure.com/courses/122789/assignments/syllabus


Week 12 (Mar. 30) - Mixed Methods

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

Read:


Week 13 (April 6) - Project IA

Presenters (7 students, TBD): Apply the weekly assignment rubric to your own precandidacy proposal. Present your proposal to the class, covering the main elements of the rubric along the way

Non-presenters: Apply the weekly assignment rubric to one core paper from your lit review. Be prepared to explain it in detail to other students.

Week 14 (April 13) - Project IB

Presenters (7 students, TBD): Apply the weekly assignment rubric to your own precandidacy proposal. Present your proposal to the class, covering the main elements of the rubric along the way

Non-presenters: Apply the weekly assignment rubric to one core paper from your lit review. Be prepared to explain it in detail to other students.

Course Summary:

<table>
<thead>
<tr>
<th>Date</th>
<th>Details</th>
<th>Due Time</th>
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<tbody>
<tr>
<td>Thu Jan 12, 2017</td>
<td>Paradigm affiliation note card (<a href="https://umich.instructure.com/courses/122789/assignments/255095">https://umich.instructure.com/courses/122789/assignments/255095</a>)</td>
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<td>Thu Jan 26, 2017</td>
<td>Assignment #1 - in pairs - generate topics and readings (<a href="https://umich.instructure.com/courses/122789/assignments/257980">https://umich.instructure.com/courses/122789/assignments/257980</a>)</td>
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<td>Thu Feb 2, 2017</td>
<td>Week 5 writing on readings: Non-parametric analysis of correlation (<a href="https://umich.instructure.com/courses/122789/assignments/268347">https://umich.instructure.com/courses/122789/assignments/268347</a>)</td>
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<td>Thu Feb 9, 2017</td>
<td>Literature review for precandidacy project (<a href="https://umich.instructure.com/courses/122789/assignments/269838">https://umich.instructure.com/courses/122789/assignments/269838</a>)</td>
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<td>Thu Feb 16, 2017</td>
<td><a href="https://umich.instructure.com/courses/122789/assignments/269850">Week 7 - discussion of readings</a></td>
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<td><a href="https://umich.instructure.com/courses/122789/assignments/269851">Week 8 - discussion of readings</a></td>
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<td>Thu Feb 23, 2017</td>
<td><a href="https://umich.instructure.com/courses/122789/assignments/266625">Introduction or abstract for precandidacy project</a></td>
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<td>Thu Mar 9, 2017</td>
<td><a href="https://umich.instructure.com/courses/122789/assignments/269853">Week 9 - discussion of readings</a></td>
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<td>Thu Mar 16, 2017</td>
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<td><a href="https://umich.instructure.com/courses/122789/assignments/269856">Week 11 - discussion of readings</a></td>
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<td><a href="https://umich.instructure.com/courses/122789/assignments/269857">Week 12 - discussion of readings</a></td>
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<td>Tue Apr 11, 2017</td>
<td><a href="https://umich.instructure.com/courses/122789/assignments/295469">Project presentations (group I) and weekly assignment (group II)</a></td>
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<td>Fri Apr 14, 2017</td>
<td><a href="https://umich.instructure.com/courses/122789/assignments/297248">Project presentations (group II) and weekly assignment (group I)</a></td>
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<td>Thu Apr 20, 2017</td>
<td><a href="https://umich.instructure.com/courses/122789/assignments/266627">Final precandidacy proposal</a></td>
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