

Carsten Holz
SOSC 511 Social (Science) Research Methods
Fall 2006, Saturday 10:00-12:50, Room 4504

OH: By appointment, before or after class, Room 3382
E-mail: socholz@ust.hk
Course website: <http://teaching.ust.hk/~sosc511>

Course objective

Overall objective of the course is to enable you to conduct your own research project. The core issues are how to translate concepts and theories about human interactions and institutions into empirically testable propositions, and how to design your research, collect data (information), and analyze the data. The course also offers opportunities to enhance your critical thinking about social and economic issues, and to evaluate research conducted by others.

Requirements

(1) One presentation to the class. Topics are listed below. Most topics are on issues in the philosophy of science. Graded pass/fail.

(2) Write a critical review of the presentation (or paper presented) in a Social Science Division Seminar (or some non-SOSC seminar, in which case preferably let the instructor know beforehand). Maximum length: 1000 words. Your review should comprise (i) a summary of the author/ presenter's argument, (ii) your critical evaluation, and (iii) your suggestions on how this research/ paper can be improved. If you have a copy of the seminar paper, also hand it in together with your paper. Hand in any time in the semester, with a final deadline of two weeks before the last class in the semester, i.e., 10am on 25 November. Graded pass/fail.

(3) Write a complete short research paper in any field of the social sciences (not to exceed 1500 words). Detailed instructions are given on a separate sheet. Deadline: 12 noon on Friday, 17 November. Graded pass/fail.

(4) The course has between 7 and 10 assignments. You need to pass at least 6 assignments. Each assignment passed contributes a maximum of 2 percentage points to the final grade.

(5) We will have a 5-minute quiz at the beginning of at least 10 classes, starting 16 Sept. See the class schedule with reading list for the coverage of the quizzes. Out of the 10 or more quizzes, a maximum of 8 will be counted towards the final grade, with 1 percentage point each.

(6) Write a research proposal in any field of the social sciences (not to exceed 3000 words). Detailed instructions are given on a separate sheet. Deadline: 12 noon on Wednesday, 13 December. Accounts for 40% of the course grade.

(7) The final examination is scheduled by ARR in the exam period. All required readings and material that has been covered in class are exam-relevant. The final exam accounts for 40% of the course grade.

Readings

Required textbooks

- (1) Singleton, Royce A. Jr., Bruce C. Straits, and Margaret Miller Straits. *Approaches to Social Research*. Fourth edition. Oxford: Oxford University Press, 2005. [Reserve H62 S4776 2005] This book contains study questions; feel free to go over these study questions yourself.
- (2) King, Gary, Robert O. Keohane, and Sidney Verba. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton, New Jersey: Princeton University Press, 1994. [Reserve H61 K5437 1994]
- (3) Chalmers, A.F. *What is This Thing Called Science: An Assessment of the Nature and Status of Science and Its Methods*. Third edition. London: University of Queensland Press, 1999. [Reserve Q175 C446 1999]

We will cover the above three books in full. Additional (minor) required readings are listed below with each class.

Recommended (HKUST library)

- * “Ten Steps to a Research Paper.” <http://library.ust.hk/serv/skills/libskill.html>
- * Guidelines to literature research in our library: <http://library.ust.hk/guides/sosc511.html>

Course structure

Introduction

Scientific and Logical Foundations of Social Research

Research Design:

- Elements of research design

- Measurement

- Sampling

Methods of Data Collection

- Experimentation and experimental designs

- Survey research and survey instrumentation

- Field research

- Research using available data

- Multiple methods, Evaluation research

Qualitative Analysis

Quantitative Analysis

- Data processing and elementary data analysis

- Multivariate analysis

Assumptions and Mathematics

Class presentation

Choose two of the topics listed below. For each, prepare a 5-10min presentation and a one-page handout.

The handout should start with a one-sentence summary of the issue, followed by a one-paragraph explanation of the core argument. The handout must not exceed one page.

In your presentation include one example that you come up with yourself to illustrate the issue you are presenting, and conclude on the implications of the issue you are presenting for (your/ our) research. If possible, try to focus on what the text says about *how to conduct scientific research*, and on *how science progresses*.

You must not read from a prepared text. Half a sheet of paper with a few notes is OK.

1. Chalmers Ch. 1: Science as knowledge derived from the facts of experience
2. Chalmers Ch. 2: Observation as practical intervention
3. Chalmers Ch. 3: Experiment
4. Chalmers Ch. 4: Deriving theories from the facts: induction
5. Chalmers Ch. 5: Introducing falsificationism
6. Chalmers Ch. 6: Sophisticated falsificationism, novel predictions and the growth of science
7. Chalmers Ch. 7: The limitations of falsificationism
8. Chalmers Ch. 8: Theories as structures I: Kuhn's paradigms
9. Chalmers Ch. 9: Theories as structures II: Research programs
10. Chalmers Ch. 10: Feyerabend's anarchistic theory of science
11. Dyson, Freeman. "The Scientist As a Rebel." Chapter 1 in John Cornwell, ed. *Nature's Imagination: The Frontiers of Scientific Vision*. Oxford: Oxford University Press 1995, 1-11.
12. Chalmers Ch. 11: Methodological changes in method
13. Chalmers Ch. 13: The new experimentalism
- *14. Chalmers Ch. 14: Why should the world obey laws? [* = difficult(?)]
15. Chalmers Ch. 15: Realism and anti-realism
16. Singleton Ch. 17: Research Ethics [plus, optional: American Sociological Association code of ethics: <http://www.asanet.org/members/ecoderev.html>]
17. Feminist methodology.
Harding, Sandra. "Is There a Feminist Method?" Chapter 1 in Sandra Harding, ed. *Feminism and Methodology: Social Science Issues*. Bloomington, IN: Indiana University Press, 1987; pp.1-14. [Reserve H61 F38 1987]
Grant, Linda, Kathryn B. Ward, And Xue Lan Rong. "Is There an Association Between Gender and Methods in Sociological Research?" *American Sociological Review* 52, no. 6 (Dec. 1987): 856-62.
18. Mishler, Elliot G. "Meaning in Context: Is There Any Other Kind?" *Harvard Educational Review* 49, no. 1 (Feb. 1979): 1-19.
19. Hammersley, Martyn. "Deconstructing the Qualitative-Quantitative Divide." Chapter 2 in Brannen, J. (ed.). *Mixing Methods: Qualitative and Quantitative Research*. Aldershot: Avebury, 1992, pp. 39-53. [Reserve H61 M548 1992]
20. Machlup, Fritz. "Are the Social Sciences Really Inferior?" In Michael Martin and Lee C. McIntyre. *Readings in the Philosophy of Social Science*. Cambridge: The MIT Press, 1994, pp. 5-20. [Reserve H61 R33 1994]
- *21. Friedman, Milton. "The Methodology of Positive Economics." In Milton Friedman. *Essays in Positive Economics*. Chicago: The University of Chicago Press, 1953, pp. 3-46. [Reserve HB33 F75 1953] [* = difficult(?)]
22. Machlup, Fritz. "The Problem of Verification in Economics." Chapter 3 in *Selected Economic Writings of Fritz Machlup* (edited by George Bitros). New York: New York University Press, 1976, pp. 57-79. [Reserve HB171 M265 1976]
23. Beed, Clive, and Owen Kane. "What Is the Critique of the Mathematization of Economics?" *Kyklos* 44, no. 4: 581-612.

Some of the chapters in Chalmers summarize a larger body of literature. You are free to go back to the original writings (such as by Popper, Kuhn, Lakatos or Feyerabend), but don't have to.

Class schedule with reading list

9 September

Class: Singleton Chapters 1, 2; King Chapter 1; Chalmers Chapter 1

16 September

Readings:

Singleton Chapters (1,) 2

King Chapter 1

Chalmers Chapters (1,) 2

Quiz coverage: Singleton Chapter 2; King Chapter 1

[for King, here and below: mathematical/ statistical passages are not covered in the quiz]

Presentations: Chalmers Chapter 2

Assignment due this date:

- (i) List at least ten distinct research questions in an area or in areas of interest to you. Bring three additional hard copies of your list to class.
- (ii) Do a literature search on any *one* research topic of your interest; then describe on one sheet of paper what you did (what kind of searches you ran), with a very brief statement on how many titles you found in each type of search and how successful you think the particular search was. Apart from handing in one copy, bring 3 copies to class.
- (iii) Identify the 6 most important academic journals in your area of interest and rank them.

Recommended reading: Bausell, R. Barker. *Conducting Meaningful Experiments: 40 Steps to Becoming a Scientist*. London: Sage Publications, 1994. [Reserve Q180.55 M4 B38 1994] Chapter 1 "What You Need (and Don't Need) to Be a Scientist" (pp. 11-20).

23 September

Readings:

King 2, 3

Chalmers 3, 4

Quiz coverage: King 2, 3

Presentations: Chalmers 3, 4

Assignment due this date: Choose three good academic journals of interest to you or your research. Find the issues (copies, booklets) of roughly the most recent year of each of these journals. (With on average 4 issues a year per journal, this implies 12 journal issues.) Browse through the issues, reading at most the abstracts. (1) Try to categorize the various articles by subject into 3 to 12 categories. Make a simple table listing your subject categories and the number of articles you found for each category. If you need a category "others," try to keep the number of articles you have to place in this category small. (2) List approximately 3 research topics that you think dominate among the articles in these journals. (Can be very specific and don't need to cover all articles.) Apart from handing in one copy, bring 3 copies to class.

Recommended reading: Rudestam, Kjell Erik, and Rae R. Newton. *Surviving Your Dissertation*. London: Sage Publications, 1992. [Reserve LB2369 R83 1992] Chapter 2 "Selecting a Suitable Topic" (pp. 9-19).

Optional reading: Bausell, R. Barker. *Conducting Meaningful Experiments: 40 Steps to Becoming a Scientist*. London: Sage Publications, 1994. [Reserve Q180.55 M4 B38 1994]

Chapter 3 “Formulating a Meaningful Hypothesis” (pp. 38-46);
Chapter 4 “Evaluating the Meaningfulness of the Research Hypothesis” (pp. 47-57).

30 September

Readings:

Singleton 3, 4

Chalmers 5, 6

Quiz coverage: Singleton 3, 4

Presentations: Chalmers 5, 6

Assignment due this date: Write a literature review on any one topic of your choice. (See separate sheet for detailed instructions.) The references need to follow the formatting practice in a journal of your choice; state at the end which journal’s guidelines you are following.

Recommended reading: Grosf, Miriam Schapiro. *A Research Primer for the Social and Behavioral Sciences*. Orlando: Academic Press, 1985. Ch. 2 “Choosing the Research Problem and Stating the Problem-Question” (pp. 25-49).

7 October (or thereabouts)

Readings:

Carmines, Edward G., and Richard A. Zeller. *Reliability and Validity Assessment*. London: Sage Publications, 1979; in particular pp. 29-51 (but skip pp. 48f). [Reserve H61 C26 1979]

Rubin, Zick. “Measurement of Romantic Love.” *Journal of Personality and Social Psychology* 16, no. 2 (1970): 265-73.

Chalmers 7, 8

Quiz coverage: relevant pages from Carmines, non-technical aspects of Rubin

Presentations: Chalmers 7, 8

Assignment due this date: To be announced

Recommended reading: Young, James Webb. “A Technique for Producing Ideas.” Chicago: NTC Business Books, 1975.

14 October

Readings:

Singleton 5

King 4

Chalmers 9, 10

Quiz coverage: Singleton 5, King 4, Gary Fields (“Inequality and Poverty in India...” Handout)

Presentations: Chalmers 9, 10

Assignment due this date: To be announced.

Recommended reading: Singleton: Chapter 17.

Optional reading: Henry, Gary T. *Practical Sampling*. Applied Social Research Methods Series Volume 21. London: Sage Publications, 1990; in particular pp. 34-46 and 118-23. [Reserve HA 31.2 H46 1990]

21 October

Readings:

Singleton 6, 7

Dyson

Chalmers 11

McCloskey, Deirdre N. *Economical Writing*. Long Grove, Il.: Waveland Press, 2000; sections 1-15.

Quiz coverage: Singleton 6, 7; McCloskey sections 1-15

Presentations: Dyson, Chalmers 11

Assignment due this date: To be announced

Optional reading: Bausell, R. Barker. *Conducting Meaningful Experiments: 40 Steps to Becoming a Scientist*.

London: Sage Publications, 1994, Chapters 5-9. [Reserve Q180.55 M4 B38 1994] ["Designing an Experiment" (pp. 58-92); "Designing Experimental Studies to Achieve Statistical Significance" (pp. 93-108); "Conducting the Pilot Study (ies)" (pp. 109-119); "Conducting the Actual Study" (pp. 120-125); "Analyzing and Reporting the Results" (pp. 126-140)]

28 October

Readings:

Singleton 8, 9

McCloskey, Deirdre N. *Economical Writing*. Long Grove, Il.: Waveland Press, 2000; sections 16-31.

Chalmers 13, 14

Quiz coverage: Singleton 8, 9; McCloskey sections 16-31

Presentations: Chalmers 13, 14

Assignment due this date: To be announced

Optional reading: Fowler, Floyd J. Jr. *Survey Research Methods*. Applied Social Research Methods Series Volume 1. London: Sage Publications, 2002. [Reserve HN29 F68 2002]

4 November

Readings:

Singleton 10, 11

Chalmers 15, Singleton Ch. 16

Quiz coverage: Singleton 10, 11

Presentations: Chalmers 15, Singleton 16

Assignment due this date: To be announced.

Optional reading: Burgess, Robert G. *In the Field: An Introduction to Field Research*. London: Unwin Hyman, 1984. [Reserve HM48 B87 1984] [pick the chapter(s) that interest you most]

11 November

Readings:

Singleton 12, 13

Quiz coverage: Singleton 12, 13

Presentations: None

Assignment due this date: To be announced.

Recommended readings: Salant, Walter. "Writing and Reading in Economics." *Journal of Political Economy*, no. 77 (July-August 1969): 545-58.

Short research paper due 12 noon on Friday, 17 November.

18 November

to be decided

25 November

Readings:

King 5, 6
Harding/ Grant
Mishler

Quiz coverage: King 5, 6

Presentations: Harding/ Grant, Mishler

Assignment due this date: To be announced.

Optional reading: Dey, Ian. *Qualitative Data Analysis: A User-Friendly Guide for Social Scientists*. London: Routledge, 1993. [Reserve HA32 D488 1993; this is a whole book, skim quickly]

2 December

Readings:

Singleton 14, 15
Those of the following that are presented in class:

Hammersly, Machlup (Inferior), Friedman, Machlup (Verification), Beed

Quiz coverage: Singleton 14, 15

Presentations: Hammersly, Machlup (Inferior), Friedman, Machlup (Verification), Beed

Assignment due this date:

- (i) If required, hand in a revised version of the short research paper.
- (ii) Write a (second, distinct) literature review on any one topic of your choice. (See separate sheet for detailed instructions.)

Recommended reading:

American Sociological Association. *ASA Style Guide*. Second edition. Washington, D.C.: American Sociological Association, 1997.

Hamermesh, Daniel S. "The Young Economist's Guide to Professional Etiquette." *Journal of Economic Perspectives* 6, no. 1 (Winter 1992): 169-79.

Optional reading:

Henkel, Ramon E. *Tests of Significance*. London: Sage Publications, 1976. [Reserve H61 H45 1976]

Leijonhufvud, Axel. "Life Among the Econ." *Western Economic Journal* 11, no. 3 (September 1973): 327-337.

9 December

No class (due to the instructor's absence; this class is held on or around 7 October 06)

Philosophy of science: general readings and reference works

- Blackburn, Simon. *The Oxford Dictionary of Philosophy*. Oxford: Oxford University Press, 1994. [Reference B41 B53 1994]
- Goodman, Robert F., and Walter R. Fisher (eds.). *Rethinking Knowledge: Reflections across the Disciplines*. Albany: State University of New York Press, 1995. [Reserve BD161 R484 1995]
- Habermas, Juergen. *On the Logic of the Social Sciences*. Cambridge, Massachusetts: MIT Press, 1988. [Reserve H61 H2513 1988]
- Lacey, A.R. *A Dictionary of Philosophy*. Third edition. London: Routledge & Kegan Paul, 1996. [Reference B41 L32 1996]
- Runes, Dagobert D. *Dictionary of Philosophy*. New York: Philosophical Library, 1983. [Reference B41 D53 1983b]
- Weber, Max. *The Methodology of the Social Sciences*. New York: Macmillan (The Free Press), 1949. [Reserve H61 W42 1949]

How to write research papers: general readings and reference works

- The Chicago Manual of Style*. Chicago: The University of Chicago Press, 1982. [Reserve and Reference Z253 U69 1993]
- Cuba, Lee. *A Short Guide to Writing About Social Science*. Third edition. New York: Harper Collins, 1997. [Reserve H91 C78 1997]
- Davis, Gordon B., and Clyde A. Parker. *Writing the Doctoral Dissertation*. Hauppauge, New York: Barron's Educational Series Inc., 1979. [Reserve LB 2369 D357 1979]
- Mauch, James E., and Jack W. Birch. *Guide to the Successful Thesis and Dissertation*. Third, revised edition. New York: Marcel Dekker, 1993. [Reserve LB2369 M376 1993]
- Rudestam, Kjell Erik, and Rae R. Newton. *Surviving Your Dissertation*. London: Sage Publications, 1992. [Reserve LB2369 R83 1992]
- Singleton Ch. 17 "Writing Research Reports" (pp. 497-510).
- Wolcott, Harry F. *Writing up Qualitative Research*. Qualitative Research Methods Volume 20. London: Sage Publications, 1990. [Reserve T11 W65 1990]

On publishing

- Fischer, Charles C., and Janice E. Lawrence. "Writing for Economics Journals: Strategic Elements of Success." *The Journal of Economics XXIII*, no. 2 (1997): 31-45.
- Woodward, John. *How to Run a Paper Mill: Writing Technical Papers and Getting Them Published*. Winchester, UK: Information Geometers, 1992. [Reserve T11 W655 1992]
- Luey, Beth. *Handbook for Academic Authors*. Third edition. Cambridge: Cambridge University Press, 1996. [PN146 L84 1995]
- "How to Publish in Top Journals." <http://www.roie.org/how.htm>

Optional textbooks, similar to Singleton

- Babbie, Earl. *The Practice of Social Research*. Ninth edition. Belmont, CA: Wadsworth, 2001. [Reserve H62 B2 2001]
- Bailey, Kenneth D. *Methods of Social Research*. Fourth edition. New York: The Free Press, Macmillan, 1994. [Reserve HM24 B295 1994]
- Bainbridge, William Sims. *Survey Research: A Computer-Assisted Introduction*. Belmont, CA: Wadsworth, 1989. [Reserve HN29 B35 1989]
- Fankfort-Nachmias, Chava, and David Nachmias. *Research Methods in the Social Sciences*. Fifth edition. New York: St. Martin's Press, 1996. [Reserve H61 N25 1992]
- Grosf, Miriam Schapiro, and Hyman Sardy. *A Research Primer for the Social and Behavioral Sciences*. New York: Academic Press Inc., 1985. [Reserve H62 G7658 1985]
- Neuman, W. Lawrence. *Social Research Methods: Qualitative and Quantitative Approaches*. Second edition. Boston: Allyn and Bacon, 2000. [Reserve HM48 N48 2000]
- Yu Binghui (translator). *Shehui yanjiu de fangfa*. Xiandai shehui xue bijiao yanjiu congshu. Hangzhou: Zhejiang renmin chubanshe, 1986.
- Zhong Lunna. *Yingyong shehui kexue yanjiufa*. Xianggang: Shangwu yinshu guan, 1992. [Reserve H61 C468 1992]