COMM 305 — Understanding Social Science Research

Professor Lian Jian

Office hours: by appointment via email

Class meets: TuTh 3:30-4:50p, ASC 204

Course Description

The value of science can only be realized if it is understood by people and put into practice. This course guides you to evaluate scholarly publications of social scientific research, and to apply the results of social science in daily practices.

In order to truly appreciate scientific research, we need to understand the principles of research methods. This learning process is best facilitated by a combination of lectures, problem sets, and exams. In addition, there will be assignments in which you are required to summarize and critically evaluate a series of research articles in the field of communication. Evaluation of these assignments will be based on whether you have summarized the main findings in the assigned articles, and more important, whether you have identified their main flaws.

There is no prerequisite for this course.

Course materials

- **[Required]** Rowntree, Derek. (2003). *Statistics Without Tears: A Primer for Non-Mathematicians*. New York: Charles Scribner's sons.

- **[Required]** Huff, Darrell. (1993). *How to lie with statistics*. New York: W. W. Norton & Company.

Requirements and Evaluation

Evaluation will be on the following basis:

Exam 1	25%
Exam 2	25%
Assignments	25%
Final Report	15%
Participation	10%

There will be five assignments, each worth 5%.
This course uses the following grading scheme:

A	93% or higher
A-	90%-92%
B+	87%-89%
B	83%-86%
B-	80%-82%
C+	77%-79%
C	73%-76%
C-	70%-72%
D+	67%-69%
D	63%-66%
D-	60%-62%
F	59% or lower

Examinations

There will be two examinations for this course, and they generally hold the following format: 8 to 15 multiple choice questions (20-30% of the examinations points); 5 to 8 fill in the blanks or short answer questions (10-30% of the points); 4 to 6 analysis questions (40-50% of the points).

These two exams are non-cumulative.

The examinations require significant effort and resources to design and conduct. Holding make-up examinations demands even more, which may not be possible or reasonable. So, make every effort to take the examinations on their scheduled dates. Check the course calendar below.

Requests to take examinations on other dates will be considered only for unexpected, justifiable and documentable reasons. For example, if you missed the scheduled examination to attend to a friends sudden illness, the instructors will ask for formal documentation from the medical authorities.

Assignments

Each assignment will contain multiple choices, conceptual questions, critiquing research articles, or problems sets on statistical techniques. You are required to complete the assignments **INDEPENDENTLY**. No group discussion or any study groups are allowed before the submission of assignments.

Assignments will be submitted in hardcopies at the start of the class on the day indicated in the syllabus. **Late assignments will not be graded.** All assignments must

be the original work of the student and not used for any other course. Violation of this policy is an Academic Integrity Violation.

Questions about grades should be addressed in a timely manner. There is a 24-hour "wait period" after receiving a grade, but then you should address questions within the next 10 days. Requests for grade changes must be **written and include justification**. A re-grade could lead to either higher or lower points.

Final Report

The instructor team will provide a list of scientific research papers after Exam 1. You are required to select one from the list (if you want to pick a paper outside of our list, you need to obtain instructors' approval first), and write a report and a critique based on it. Your report should include the following:

- A one-page summary of the paper in your own words. Summarize the main findings of the paper, the method used, and the practical implications of the results.

- A 3-5 page (double spaced) critique of the research. Your critique should include comments on both the strengths and weaknesses of the paper. For the weaknesses you point out, suggest improvements.

Participation

There are assigned readings before each lecture. You are required to complete these readings and come to class prepared to discuss the material. 6% of the participation score is based on the instructors' general impressions about your *constructive* inputs in the class discussion.

You are allowed **three absences** during the semester without penalty. Thereafter, each unexcused absence costs 1% of the total grade. Having four unexcused absences costs 4% of the final score (i.e., a 90% drops to 86%). Absences beyond the fourth open the possibility that you may fail the course. Arriving past five minutes late to class will incur a penalty (half that of absences).

Students who are instant messaging, web surfing, or involved in other similar activities during class will be marked as **absent**.

Extra Credit

You can earn extra credit (2 points max per student) by being an effective scientific research/reporting police.

- This is a team project. Each team should have 3 people.

- To earn 2 extra points, find a misleading *report* of a scientific study in a newspaper (e.g., LA Times, USA Today) or a magazine (e.g., The Economist), and identify the *original* research article. The assignment is to read both articles and write a critical report about the news article. Submit the news article, the original

research article, a short summary of the study in your own words, and explain why you think the report is misleading. Again the instructors will evaluate your submission and decide if you get the extra credit.

- Each team needs to give a 5-min presentation (no slides required) in class, to cover the main points. The presentation is not graded but required. Each team needs to sign up for EC by Nov 30, so that a presentation slot could be allocated.

Religious Holy Days

You may arrange to take an exam on an alternative date if the exam falls on a religious holy day. Notify the instructor at least **two weeks in advance** of the holy day. Do not expect to be excused from taking the exam on the assigned date if you fail to notify your instructor two weeks in advance of the holy day. The same policy applies to assignments: you need to ask for an extension two weeks in advance otherwise it will be treated as a late assignment.

1 Statement on Academic Conduct and Support Systems

1.1 Academic Conduct

Plagiarism presenting someone elses ideas as your own, either verbatim or recast in your own words is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Section 11, Behavior Violating University Standards `https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/`. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, `http://policy.usc.edu/scientific-misconduct/`.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the Office of Equity and Diversity http://equity.usc.edu/ or to the Department of Public Safety `http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us`. This is important for the safety whole USC community. Another member of the university community such as a friend, classmate, advisor, or faculty member can help initiate the report, or can initiate the report on behalf of another person. The Center for Women and Men `http://www.usc.edu/student-affairs/cwm/` provides 24/7 confidential support, and the sexual assault resource center webpage sarc@usc.edu describes reporting options and other resources.

1.2 Support Systems

A number of USCs schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose

primary language is not English should check with the American Language Institute `http://dornsife.usc.edu/ali`, which sponsors courses and workshops specifically for international graduate students. The Office of Disability Services and Programs `http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html` provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, USC Emergency Information `http://emergency.usc.edu/` will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

Schedule

Week 1 **Aug 25 ∼ 29, 2014**

Session A — Introduction

Session B — Deduction versus induction; falsifiability

- [On Blackboard] Babbie (2008), p.23-24 .
- [On Blackboard] Alan Chalmers. *Chapter 4. Introducing Falsificationism.* Hackett Publishing Company, Indianapolis, Indiana, 1976.

Week 2 **Sept 2 ∼ 5, 2014**

Session A — Social science and hypotheses

- [On Blackboard] Hayes (2005), p.8-15.
- [On Blackboard] Williams and Monge (2001), p.62-66.

Session B — What's in a research paper?

- [On Blackboard] Manuscript Structure and Content, *Publication Manual of the APA*, Sixth Edition, 2009, p.25-36.
- [On Blackboard] Angeline S Lillard and Jennifer Peterson. The Immediate Impact of Different Types of Television on Young Children's Executive Function. *Pediatrics*, 128(4):644–649, December 2011.

Week 3 **Sept 8 ∼ 12, 2014**

Session A — Descriptive statistics

- Ch 3 of Rowntree book.
- Ch 2 and 5 of Huff book

Session B — Measurement

- [On Blackboard] Hayes (2005), Measurement, p.16-30.
- Ch 4 of Huff book

Week 4 **Sept 15 ∼ 19, 2014**

Session A — Discussing Measurement

- Reading will be handed out in class.

Session B — Probability and distributions

- [On Blackboard] Aczel (2004), p.1-16.
- Rowntree book, p38-64.

- **[Assignment 1 due.]**

Week 5 **Sept 22 ∼ 26, 2014**

Session A — Introducing Normal distribution

- Rowntree book, p64-81.

Session B — Sampling

- [On Blackboard] Hayes (2005), Ch 3, Sampling.
- Ch 1 of Huff book

Week 6 **Sept 29 ∼ Oct 3, 2014**

Session A — Discussing sampling

Session B — Review for exam 1

- **[Assignment 2 due.]**

Week 7 **Oct 6 ∼ 10, 2014**

Session A — Inferences: from sample to population

- Ch 5 of Rowntree book
- Ch 3 of Huff book

Session B — Exam 1

Week 8 **Oct 13 ∼ 17, 2014**

Session A — Two-sample t tests

- Rowntree book, p.102-120 and p.128-141.

Session B — Discussing two-sample t tests

- [On Blackboard] Dmitri Williams, Nick Yee, and Scott E Caplan. Who plays, how much, and why? Debunking the stereotypical gamer profile. *Journal of Computer-Mediated Communication*, 13(4):993–1018, Jul 2008.

Week 9 **Oct 20 ∼ 24, 2014**

Session A — Correlations and regressions

- Rowntree book, p.155-184.

Session B — Correlation, causation, and third variables

- [On Blackboard] Hayes (2005), p.323-328.
- Ch 8 of Huff book

Week 10 **Oct 27 ∼ Oct 31, 2014**

Session A — Content analysis

- [On Blackboard] Lemi Baruh. Publicized Intimacies on Reality Television: An Analysis of Voyeuristic Content and Its Contribution to the Appeal of Reality Programming. *Journal of Broadcasting and Electronic Media*, 53(2):190–210, September 2009.

- **[Assignment 3 due.]**

Session B — Survey research: biases and reliability

- [On Blackboard] Babbie (2008), p.268-291.
- [On Blackboard] Nicole B Ellison, Charles Steinfield, and Cliff Lampe. 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, 2007.

- **Today is the last day for signing up for extra credit projects.**

Week 11 **Nov 3 ∼ 7, 2014**

Session A — Experiments: treatment and control

- [On Blackboard] Babbie (2008), Experiments, p.246-254.

Session B — Experiments continued

- [On Blackboard] Babbie (2008), Validity issues in experimental research, p.255-265.
- Handouts will be distributed in class.

Week 12 **Nov 10 ∼ 14, 2014**

Session A — One-way ANOVA

- Rowntree book, p. 141-150.

- **[Assignment 4 due.]**

Session B — Two-way ANOVA

- [On Blackboard] Laurent Bègue, Brad J Bushman, Oulmann Zerhouni, Baptiste Subra, and Medhi Ourabah. 'Beauty is in the eye of the beer holder': People who think they are drunk also think they are attractive. *British Journal of Psychology*, 104(2):225–234, May 2012.

Week 13 **Nov 17 ∼ 21, 2014**

Session A — Discussing One-way and Two-Way ANOVA

- [On Blackboard] R M Calogero, A Pina, and R M Sutton. Cutting Words: Priming Self-Objectification Increases Women's Intention to Pursue Cosmetic Surgery. *Psychology of Women Quarterly*, 38(2): 197–207, May 2014.

Session B — Ethics in research

- Ch 10 of Huff book.

Week 14 **Nov 24 ∼ 28, 2014**

Session A — Review for Exam 2

- **[Assignment 5 due.]**

Session B — Thanksgiving break.

Week 15 **Dec 1 ∼ 5, 2014**

Session A — Extra credit presentations

Session B — Exam 2

Week 16 **2pm Tuesday, Dec 16, 2014**

- **Extra Credit Report Due at 2pm for Submission on Blackboard**
- **Final Report Due at 2pm for Submission on Blackboard**

Have a great winter break!