University of Toronto

Sociology 202H1S-L0101
Quantitative Analysis in Social Science Research

Summer 2014

Tuesdays & Thursdays 3-5pm
MP103

Instructor: Mitch McIvor
Office Hours: Wednesdays 2-4pm or by appointment
Office: Room 333, Sociology Department (725 Spadina Ave.)
Email: mitchell.mcivor@mail.utoronto.ca

TAs: Athena Engman
Office Hours: Will only hold hours the week of each test, times TBA
Office: Room 225, Sociology Department (725 Spadina Ave.)
Email: athena.engman@utoronto.ca
- *Please e-mail Athena in advance of attending office hours so she knows to expect you.*

1. Course Objectives

This course has three goals: (1) to provide you with a good understanding of statistical reasoning; (2) to teach you how to perform basic statistical analyses; and (3) to make clear why statistics are important to sociological research and to understanding society in general. The course will be based on teaching basic statistical theories and procedures, but extensive examples from real research will also be used to illustrate these ideas and techniques. By the end of the course you will not only be able to understand and do basic statistics but you will also be able to understand and critically analyze quantitative research in sociology as well as in popular media.

2. Prerequisites

The pre-requisites for the course are ***SOC101Y: Introduction to Sociology*** (or SOC102H1 & SOC103H1) and ***SOC200H1: Logic of Social Inquiry***. Students who do not have these pre-requisites will be removed upon discovery without notice.

3. Texts & Materials

3-i: Required Textbook

Haan, Michael. 2013. *An Introduction to Statistics for Canadian Social Scientists, 2nd edition*. Don Mills, Ontario: Oxford University Press.

- This textbook is available at the U of T Bookstore.

3-ii: Suggested Texts:

Aneshensel, Carol S. 2002. *Theory-Based Data Analysis for the Social Sciences*. Thousand Oaks, California: Sage Publications.

Allison, Paul D. 1999. *Multiple Regression: A Primer*. Thousand Oaks, California: Pine Forge Press.

- These books are **<u>not required</u>** but may help you better understand course material.

3-iii: Calculator

You will need a basic scientific calculator for the course. Make sure that you spend some time reading the manual for your calculator — it is your responsibility to know how to use it.

Blackboard:

Blackboard will be an important resource during this class. If you misplace this syllabus you can download an electronic copy from the course site on blackboard and I will post the lecture slides on blackboard the night before each lecture. I will occasionally also post supplementary readings and links to online media material (videos, online PowerPoint presentations, etc.) for each topic. You are not required to review the supplementary resources, but they can provide additional help or alternative ways of understanding. Finally, the discussion board can (and should!) be used to ask questions and discuss class materials with your classmates. I will monitor the discussion board and respond to questions posted in the threads. Questions regarding course content should be asked on the discussion board first (i.e. before you e-mail your question to myself or the TA).

Course Requirements & Evaluation

3-i: Required Readings:

Students are responsible for all material in the assigned readings. Lectures will be based on these readings but I may not cover all of the material in the readings during lecture. Despite not covering all of the textbook material, however, anything assigned from the textbook may appear in the tests or exercises.

3-ii: Lectures & Attendance:

Full and complete attendance (<u>on time</u>) is required for learning the course material. Students are responsible for being aware of what is said in class (including administrative announcements) as well as for the content presented in class. Material not found in the textbook and additional content not found on the posted lecture slides will be presented during lecture and may appear in the tests and exercises. To do well in the course students will need to attend class and take notes to supplement the lecture slides posted on Blackboard. If you miss a lecture it is your responsibility to find a fellow students willing to share notes (the TA's and Instructor <u>will not</u> provide notes on missed lecture).

3-ii: Course Evaluation:

The course will be evaluated as follows:

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Test 1 (July 17th) = 35%
Media Assignment (July 24th) = 5%
Test 2 (July 31st) = 35%
Test 3 (August 12th) = 25%

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Tests: The format for each test will be multiple choice, problem solving, and short- and long-answer. Tests will be written in the usual location of the course (SS1085) and at the usual time (3-5pm). It is important to be on time for the tests as they may take the entire class time to complete and no extra time will be given. No aids other than writing tools, a calculator and a one-page "cheat-sheet" will be permitted in the exam. The cheat sheet can be no larger than 8 ½ inches by 11 inches in size and you can include on them whatever you deem as relevant, including formulas.

Media Assignment: For the media assignment you are to find an article from a popular media outlet (newspapers, magazines, online publications, etc.) that is based on statistical findings. You will then be required to write a short response (one paragraph) that discusses one key limitation of

the statistics used in the article (for example, variables they neglected, problems with their sampling, etc.) and what this limitation means to their finding. This assignment will be marked on a pass/fail basis and are due at the beginning of class. **<u>Under no circumstances will late assignments be accepted.</u>**

IMPORTANT: All grades for tests and the assignment will be posted on blackboard within two weeks of the date they were submitted and as soon as marks are up for each you will be notified. E-mails asking when grades will be posted will not receive a response.

Policy Regarding Missed Tests:

The privilege of taking a make-up test will only be granted in cases where there is legitimate, university approved evidence of serious illness or a family emergency. Students must provide official documentation (see below) that is dated on the day of or day before the test (<u>not </u>after the test). Do <u>not </u>write the test and then later request a make-up or accommodation. If you miss the test, you must email the TA Athena Engman (athena.engman@utoronto.ca) and cc me (mitchell.mcivor@mail.utoronto.ca) within 72 hours of the test to request to write the make-up. A student who misses a test and the subsequent make-up test for a valid reason will not have a third chance to take the test. Instead, the grade assigned for the missed test will be the same as the grade the student earns for the other two course tests.

Documentation for Missed Tests:

Eligibility for make-up tests will be based on providing one of two types of official documentation. In case of illness, you must supply a duly completed Verification of Student Illness or Injury form (available at *www.illnessverification.utoronto.ca)*. A doctor's note is not acceptable. In the case of a personal or family crisis, you must get a letter from your college registrar (it is a good idea anyway to advise your college registrar if a crisis is interfering with your studies). When you obtain proper documentation you should place it in a sealed envelope addressed to Instructor Mitchell McIvor and submit this envelope to the TA at the time of the make-up test; alternatively you can also submit it to me at a class lecture, to a TA during their office hours, or you can leave it in the drop box for second-year courses in room 225 at the sociology department (725 Spadina Ave.). If using the drop box, please send TA Athena Engman (athena.engman@utoronto.ca) an email message to notify him it is there. You will not be allowed to write the make-up test until proper documentation is received.

Student Conduct:

If you have questions or concerns regarding the course e-mails should be sent to one of the TA's first. In interacting with the TA's in e-mail or during their office hours students must be respectful and inappropriate behaviour will absolutely not be tolerated. The TA's are not required to engage with a student who is being rude or hostile. Serious offenses regarding behaviour with the TA's could result in the loss of marks or worse depending on the severity of the infraction.

Please be judicious in your use of email. Before sending a question by email, be sure to check the course syllabus to see if an answer is already available. If you have a question regarding the course content, please post your question in the discussion board first so that others may benefit from the answer the TA gives. Emails and the discussion board should not be seen as an alternative to doing the assigned reading or attending lectures. Expect to receive a response from your T.A. within three working days. For more in-depth discussions of the lectures, readings, and tests, you are encouraged to take advantage of your T.A.'s office hours.

Academic Dishonesty

University policy on academic dishonesty must be strictly followed and cheating will not be tolerated. Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on an test or assignment, loss of credit with a notation on the transcript (notation reads: 'Grade of F assigned for academic dishonesty'), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the "Code of Behaviour on Academic Matters" in the Calendar of the Faculty of Arts and Science.

Accessibility

If you have a disability or health consideration that may require accommodations, Accessibility Services is your home base for support. It is important to contact the office as soon as possible so that accommodations for your needs are in place before classes start. All information about your disability is confidential and won't be shared with units outside of Accessibility Services without your consent. Accessibility services can be contacted by e-mail (www.accessibility.utoronto.ca) or alternatively you can reach them by phone at 416-978-8060.

Course Schedule

DATE	TOPIC	READINGS

* **Please note**: This is a *tentative* schedule. Unforeseen circumstances sometimes require flexibility in scheduling. If that occurs, I will notify students and provide a revised schedule.

DATE	TOPIC	READINGS
July 3:	Introduction	Chapters 1 & 2
July 8:	Univariate Statistics and Probability Theory	Chapters 3 & 4
July 10:	The Normal Curve and Normal Distribution, Measures of Central Tendency, and Standard Deviations	Chapters 5, 6, & 7
July 15:	Sampling and Generalizing from Samples to Populations	Chapters 8 & 9
July 17:	**Test 1**: Includes all materials up to this date.	
July 22:	Hypothesis Testing & Bivariate Relationships	Chapters 10, 12, & 13
July 24:	ANOVA	Chapter 14 & 15
July 29:	Correlation & Regression- Part I	Chapter 16
July 31:	**Test 2**: Includes all post-Test 1 materials	
August 5:	Correlation and Regression- Part II	Chapters 17
August 7:	Diagnosing Problems & Dealing with Missing Data	Chapters 18 & 19
August 12:	**Test 3**: Includes all material but will focus on post-Test 2 materials	