University of Toronto **SOC202H1S**
Department of Sociology **Winter 2019**

INTRODUCTION TO QUANTITATIVE METHODS

Class: Tuesday 2–4 pm in RW110 (25 Harbord St.)
Tutorial: Wed. 12–1:30 pm & 1:30-3 pm; Thurs. 10-11:30 am in FE36 (Department of Sociology, 725 Spadina Ave., basement)

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COURSE DESCRIPTION AND OBJECTIVES

This course will introduce students to the basic language and methods of quantitative methods in sociology and the social sciences in general. The course covers descriptive and basic inferential statistics, including regression analyses. We will also learn how to analyze real quantitative data using SPSS—a statistical analysis software used in a variety of professional settings. The knowledge you gain in this course will provide you with basic transferable skills in professional careers that require analytical thinking. Although knowledge of arithmetic and basic algebra is expected, this course will avoid advanced mathematical concepts. My approach involves extensive use of examples from real research to illustrate the ideas, techniques, and interpretations of quantitative methods.

This course has three main objectives:

1. Introduce you to basic statistical concepts and techniques
2. Develop your ability to interpret and write about statistical results
3. Develop your ability to analyze real data using statistical software

PREREQUISITE

The prerequisite to take this course is 1.0 FCE at the100 level (SOC101Y1, or a combination of SOC102H1+SOC103H1, SOC102H1+SOC150H1, SOC103H1+SOC150H1, or SOC100H1+SOC150H1). Students without these prerequisites will be removed at any time discovered and without notice.

REQUIRED MATERIALS

1. Textbook and Aplia (online tool)

Healey, Joseph F., Steven G. Prus., and Riva Lieflander. 2019. Statistics: A Tool for Social Research, 4th Canadian Ed., Nelson Education Ltd.

You have two options for the textbook, both available at the UofT bookstore:

1. Purchase a physical textbook bundled with a password for an Aplia account, the online system for practice assignments ($126.90).
2. Purchase a 12-month access to an electronic textbook with an Aplia account ($59.95).

2. Calculator

You must bring a non-programmable calculator for the midterm tests and the final exam.

LEARNING COMPONENTS & COURSE REQUIREMENTS

1. Getting Ready

Basic math review. If it has been a while since you have worked on math, please review the "Prologue: Basic Mathematics Review" (p.1-9) in the textbook.

Read this syllabus carefully. Given that there are several learning components in this course, it is essential that students understand the requirements from the beginning. Please read the syllabus carefully.

2. Classes and Readings

Classes will highlight the central concepts in the assigned chapters and illustrate these concepts with examples. Statistics is not a subject that you can study for a day or two before a test. The material from each class builds on those from previous classes and will gradually become more complex. Keeping up with the readings and coming to class regularly is essential to succeed in this course. It is recommended that students read the assigned readings **before** class. While I may not cover every aspect of each reading during class, all of the readings may appear in the assignments and tests.

3. Practice Assignments

Practice is key to mastery in statistics. To assist your learning, you will complete 9 practice assignments online on Aplia. This provides you with an opportunity to practice the material on your own time in a low-stakes environment. **IMPORTANT: See page 8 for steps on how to set up your Aplia account.**

Each practice assignment consists of about ten problem sets. After answering a problem set, you will know which questions you got correct/incorrect and will obtain feedback. You will then have two more opportunities to complete the problem set before proceeding to the next one (Note: the system will generate a new problem set that assess the same concepts). **Your practice assignment grade will be based on the highest of your three attempts**. If you are satisfied with the score on your first attempt, you do not need to complete further attempts.

Practice assignments will be due on Saturdays at 11:45pm. Please see the Course Schedule (page 6) for all due dates. Because practice assignments can be completed anywhere with internet connection and there is a long time window to complete the assignments, **there will be no opportunities for make-ups or extensions**. **Each practice assignment is worth 2%, for a total of 18%.**

4. Tutorials and lab assignments

Tutorials will take place every week in FE-36 (except for midterm test weeks). The main purpose of these tutorials is to introduce you to data analyses using SPSS. You will learn how to conduct analyses, interpret, and write about the results—skills that are widely applicable to a range of careers. Teaching assistants will guide you through exercises from your textbook, so **please bring your textbook to each tutorial session**. These exercises are designed to help you complete three lab assignments over the course of the semester.

You will have time to work on the lab assignments during the tutorial. If you need extra time to complete the lab assignments, you can make use of drop-in times in FE-36 to complete your assignments (dates and times TBA), or you can use computers in the Robarts Map and Data Library that have SPSS installed (5th floor of Robarts). This computer lab is typically open during regular Robarts Library hours—but please check the weekly schedule (posted by the lab doors) for any special events that may be booked. You can also check the availability of these computers online (http://caf.icicle.utoronto.ca/CAFStatus/Web/Summary/MD).

Hard copies of the lab assignments are due at three points during the semester. **Emailed assignments will NOT be accepted. You must submit your lab assignment in the tutorial that you are registered on ACORN.**

Lab Assignment	Due date	Fraction of final grade
1	Due at beginning of tutorial on 1/23 or 1/24	6%
2	Due at beginning of tutorial on 3/6 or 3/7	6%
3	Due at beginning of tutorial on 4/3 or 4/4	6%

5. Midterm tests

There will be two in-class tests that consist of multiple choice and short answer questions. Each test is worth 20% of your final grade (for a total of 40%). **Please do not forget your calculator**.

6. Final exam

The final exam will cover material from the entire semester and is worth 24% of your final grade. **Please do not forget your calculator.**

Overview of Grade Allocation

	Number of occasions	Each worth	Fraction of final grade
Practice assignments	9	2%	18%
Lab assignments	3	6%	18%
Midterm tests	2	20%	40%
Final exam	1	24%	24%
Total			100%

COURSE POLICIES

1. Attendance

Attendance and punctuality are basic requirements for effective learning. You are expected to attend every class **on time**.

2. Communication

Email. Please use your University of Toronto email to communicate with me with regard to **personal matters**, or to communicate with the TAs. We will do our best to respond to your emails within 24 hours from Monday to Friday between 9 a.m. and 5 p.m.

- Please note that the instructor and TAs will not respond to emails about issues that are clearly specified in the syllabus (e.g., due dates, office hours times).
- Requests for make-up tests and other accommodations should be sent to the Instructor.
- All emails should include the course code SOC202 in the subject line, and be signed with the student's full name and student number.

Office hours. Please do not hesitate to come and talk to us if you have any questions about the course. Our office hours are listed on the first page.

Quercus Discussion board. Students are encouraged to ask questions in class, tutorials, and office hours. It is best to address questions about concepts and calculations in person. However, if you must ask **substantive questions about the course material** or questions about the **practice and lab assignments** outside of class, tutorials, or office hours, you may post your questions on the discussion board on Quercus (**please do NOT email**). Using Quercus rather than email ensures that everybody has equal access to the same information. We will do our best to respond to questions within 24 hours from Monday to Friday between 9 a.m. and 5 p.m.

If you use the discussion board to ask questions about assignments, please be mindful of the rules guiding academic integrity (see p. 5-6). While we are happy to answer specific substantive questions, we will not check answers. **Do NOT post answers or part of your answers to lab assignments or practice assignments (i.e. "Is this answer correct?"). Sharing answers with class members on these boards violates the rules of academic integrity**. I SEP

3. Late Lab Assignments and Make-Up Tests

Late lab assignments will not be accepted, unless you have a documented reason beyond your control (e.g. illness) and provide the necessary documentation (see below). Please contact me and your TA promptly if you missed the due date and have the necessary documentation.

Likewise, 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 family emergency. Students must provide official documentation that is dated on the day of or day before the test (not after the test). If you miss the test, you must email the Instructor **within 48 hours** of the test to request to write the make-up. Make-up tests will be held on one occasion for everybody who needs to write a make-up test. It is your responsibility to bring the necessary documentation (see below).

4. Documentation

If you miss a deadline for a lab assignment or a midterm test, do not contact the instructor unless you are following the steps described here:

a. **Verification of Student Illness or Injury Form**. 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 also acceptable but MUST contain the start date and anticipated end date of the illness. The form must be placed in a sealed envelope, addressed to the instructor, and submitted in class or instructor office hours.
b. **College registrar's letter**. If a personal or family crisis prevents you from taking a test, you must obtain a letter from your college registrar. The letter must be placed in a sealed envelope, addressed to the instructor, and submitted in class or instructor office hours.
c. **Letter from accessibility services**. This documentation is useful for ongoing medical issues that require special accommodation.

5. Test Review Policy and Requests for Re-Marks

Tests will not be returned to students—but all students may review their tests with the TA during their office hours. During these sessions, TAs will not be permitted to change your mark, unless there is a basic mathematical error in the calculation of your mark. If you have substantive concerns about your test mark, you may request a re-mark in writing (email) that specifies your reasons for the request. The Instructor will handle all requests and will re-mark your entire test. **Note: Your test mark may increase, decrease, or remain the same.**

6. Academic Integrity

Academic integrity is fundamental to learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the U of T degree that you earn will be valued as a true indication of your individual academic achievement, and will continue to receive the respect and recognition it deserves. Familiarize yourself with the University of Toronto's Code of Behaviour on Academic Matters (http://www.governingcouncil.utoronto.ca/policies/behaveac.htm). It is the rule book for academic behaviour at the U of T, and **it is your responsibility to read this material and comply fully with it**. Potential offences include, but are not limited to:

Lab assignments and practice assignments:

- Sharing answers to assignments, including on social media, email, or in person
- Using someone else's ideas or words without appropriate acknowledgement
- Copying material word-for-word from a source (including, but not limited to the textbook, lectures, or study group notes) and not placing the words within quotation marks
- Submitting your own work in more than one course without the permission of the instructor
- Making up sources or facts
- Including references to sources that you did not use
- Obtaining or providing unauthorized assistance on any assignment including: having someone re/write or add material to your work

- Lending your work to a classmate who submits it as his/her own

On tests and exams:

- Using or possessing any unauthorized aid, including a cell phone
- Looking at someone else's answers
- Letting someone else look at your answers
- Misrepresenting your identity
- Submitting an altered test for re-grading

Misrepresentation:

- Falsifying or altering any documentation required by the University, including doctor's notes
- Falsifying institutional documents or grades

Students who commit an academic offence face serious penalties. University policy requires cases of academic dishonesty to be reported to the department chair and the university. You can find additional information on the university's rules and expectations about academic integrity here: http://www.artsci.utoronto.ca/osai/students

7. Accessibility

If students require accommodations or have any accessibility concerns, please visit http://studentlife.utoronto.ca/accessibility as soon as possible. I will gladly work with the service on any needed accommodation.

COURSE SCHEDULE

(This is the intended ordering of topics. Modifications may occur if necessary).

Week	Class	Tutorial	Topic and Readings	Assignments due
1	1/8	1/9 1/10	Introduction, level of measurement, intro to descriptive statistics **Reading: Chapter 1**	Practice assignment 1 (PA1) due 1/12 @ 11:45pm
2	1/15	1/16 1/17	More descriptive statistics, measures of central tendency and spread **Reading: Chapter 2 & Chapter 3**	PA2 due 1/19 @ 11:45pm
3	1/22	1/23 1/24	The normal curve, z-scores, estimating probabilities **Reading: Chapter 4**	PA3 due 1/26 @ 11:45pm Lab assignment 1 due at beginning of tutorial
4	**1/29**	**None**	**Midterm test 1**	**None**
5	2/5	2/6 2/7	Sampling, sampling distribution, confidence intervals **Reading: Chapters 5 & 6**	PA4 due 2/9 @ 11:45pm
6	2/12	2/13 2/14	Introduction to hypothesis testing, one-sample hypothesis test for means/proportions **Reading: Chapter 7 (up to end of 7.4) & Chapter 10**	PA5 due 2/16 @ 11:45pm
7	**READING WEEK: NO CLASS/TUTORIALS**			
8	2/26	2/27 2/28	Two-sample hypothesis test for means/proportions **Reading: Chapter 11**	PA6 due 3/2 @ 11:45pm
9	3/5	3/6 3/7	Chi-square test, measures of associations for nominal variables **Reading: Rest of Chapter 7 & Chapter 8**	PA7 due 3/9 @ 11:45pm Lab assignment 2 due at beginning of tutorial
10	**3/12**	**None**	**Midterm test 2**	**None**
11	3/19	3/20 3/21	Hypothesis testing and measures of association for interval-ratio variables **Reading: Chapter 13**	PA8 due 3/23 @ 11:45pm
12	3/26	3/27 3/28	Multiple regression I **Reading: Chapter 14**	PA9 due 3/30 @ 11:45pm
13	4/2	4/3 4/4	Multiple regression II **Reading: TBA**	Lab assignment 3 due at beginning of tutorial
FINAL EXAM – DATE AND TIME TBA				

HOW TO ACCESS APLIA

Registration

- Copy-paste this link to your browser and connect: https://www.cengage.com/dashboard/#/course-confirmation/NF65-ABB9-TCQ7/initial-course-confirmation.
- Under "New Students," type in your information and follow the prompts to set up your account. The prompts should be straightforward.

Payment:
If you decide to go for the e-book + Aplia option:
You can pay online using a credit or debit card, or PayPal.

If you decide to go for the physical textbook + Aplia option:
Purchase the textbook + Aplia bundle at the UofT bookstore. The book will come with a passcode to access Aplia.

System Check
To check whether your computer meets the requirements for using Aplia, go to https://www.aplia.com/support/sysreq.jsp

COURSE SCHEDULE AT A GLANCE

January 2019						
Sun	**Mon**	**Tue**	**Wed**	**Thus**	**Fri**	**Sat**
		1	2	3	4	5
6	7	8 Class	9 Tutorial	10 Tutorial	11	12 PA1 due @1145pm
13	14	15 Class	16 Tutorial	17 Tutorial	18	19 PA2 due @1145pm
20	21	22 Class	23 Tutorial Lab assignment #1 due at tutorial	24 Tutorial Lab assignment #1 due at tutorial	25	26 PA3 due @1145pm
27	28	29 TEST 1	30	31		

February 2019						
Sun	**Mon**	**Tue**	**Wed**	**Thus**	**Fri**	**Sat**
					1	2
3	4	5 Class	6 Tutorial	7 Tutorial	8	9 PA4 due @1145pm
10	11	12 Class	13 Tutorial	14 Tutorial	15	16 PA5 due @1145pm
17	18 **READING WEEK – NO CLASS/TUTORIAL**	19	20	21	22	23
24	25	26 Class	27 Tutorial	28 Tutorial		

March 2019						
Sun	**Mon**	**Tue**	**Wed**	**Thus**	**Fri**	**Sat**
					1	2 PA6 due @1145pm
3	4	5 Class	6 Tutorial Lab assignment #2 due at tutorial	7 Tutorial Lab assignment #2 due at tutorial	8	9 PA7 due @1145pm
10	11	12 TEST 2	13	14	15	16
17	18	19 Class	20 Tutorial	21 Tutorial	22	23 PA8 due @1145pm
24/31	25	26 Class	27 Tutorial	28 Tutorial	29	30 PA9 due @1145pm

April 2019						
Sun	**Mon**	**Tue**	**Wed**	**Thus**	**Fri**	**Sat**
	1	2 Class	3 Tutorial Lab assignment #3 due at tutorial	4 Tutorial Lab assignment #3 due at tutorial	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				