University of Toronto - Sociology
SOC202H1S LEC0201, Winter 2015
Quantitative Analysis in Social Science Research
Lecture: Wednesdays 4-6pm, [insert place]
Tutorials: Tuesdays 10am-11am or Thursdays 10am-11am, 725 Spadina Ave, FE 36

*Instructor:* Naomi Lightman
*Office Hours:* Wednesdays 3-4pm, Rm 397, 725 Spadina Ave
*Email:* naomi.lightman@mail.utoronto.ca

*Teaching Assistants:* TBA
*Office Hours:* Tuesdays and Thursdays, 11am-12pm, 725 Spadina Ave, Room FE36
*Emails:* TBA

*Prerequisite:* The prerequisite to take this course is SOC101Y1 (or SOC102H1+SOC103H1) and SOC200H1. Students without this prerequisite will be removed at any time and without notice.

*Course Description:* Sociology 202 is an introductory social statistics course. This course will emphasize understanding of the logics behind statistical techniques and interpretation of the data analysis outputs. The principal goal of this course is to introduce students to the fundamentals of statistical reasoning and to the role of statistical methods in social science. At the end of the course students will be able to interpret sociological research that uses basic statistical methods, to undertake elementary data analysis, and to take more advanced courses in social statistics. *Note: the drop date for this course is March 8, 2015.*

*Required Textbook:*
> Linneman, T, (2014). *Social Statistics: Managing Data, Conducting Analyses, Presenting Results (Second Edition).* Routledge.

*Required Supplies/Software:* You will require a basic scientific calculator to do calculations by hand. (This should cost no more than $20). You will also require access to SPSS for assignments.

*Recommended (but not required) additional texts for supplementary assistance:*
> Field, A. *Discovering Statistics Using IMB SPSS Statistics. SPSS for Windows Step by Step: A Simple Guide and Reference. (Fourth Edition).* 2013. Sage Publications Ltd.
> Haan, M. *An Introduction to Statistics for Canadian Social Scientists (Second Edition).* 2013. Oxford University Press.
> Kranzler, J. H. *Statistics for the Terrified (Fifth Edition).* 2010. Pearson Education International.

*Computing:* The course will use SPSS to analyse data. You can access computers with SPSS at Robarts in the Map and Data Library on the 5th floor and at OISE in the Education Commons on the 3rd floor as well as during your tutorial times in room FE36 in the sociology building. Please check online for specific time availability.

Many students may desire to use SPSS on their personal computer. Copies of the student version of the software ($60+tax) can be obtained from the Scotiabank Information Commons on the first floor of Robarts Library. SPSS can also be purchased online at *software.utoronto.ca.*

*Grading Summary and Course Requirements:*

| Component | Weight | Due Date |
|---|---|---|
| Tutorial participations & attendance | 10 percent | Participation and attendance at (an minimum of) 10 out of 12 weekly tutorials is required (1% for each) |
| Assignment 1 | 15 percent | February 4 |
| Assignment 2 | 20 percent | April 1 |
| Midterm | 25 percent | February 11 |
| Final exam | 30 percent | To be scheduled |

*Tutorial Participation:* In addition to the lectures, there will be 12 tutorials for this course. Students will receive 1% of their final grade for participation and attendance at each tutorial, up to a maximum of 10% of their grade. Tutorials will be held in FE 36, a computer lab, and will cover the basics of using SPSS, a statistical software program. This will allow students to apply their knowledge and complete the required assignments. In addition, students will be able to ask questions about the lecture materials and/or assignments during tutorials.

*Assignments.* There will be two course assignments in which students will be required to apply the concepts learned in the course to datasets using SPSS. The assignment details will be posted on Blackboard.

Assignment 1 will require students to run frequency distributions, recode a variable, report and interpret appropriate univariate statistics; and display data in appropriate graphs.

Assignment 2 will build on the skills developed in Assignment 1. Students will be required to develop and test two research hypotheses. Students will present and interpret a properly formatted cross-tabulation as well as an ANOVA.

We will discuss each assignment further in class. All late assignments must be deposited (in hard copy) in mailbox #3 in Room 225 with the date and time stamp; you must e-mail your TA that the assignment is in the box so that it can be retrieved. *A penalty of 5% per day will be deducted for all late assignments.*

*Midterm and Final Exam:* The mid-term will cover all material taught in class up to the date of the exam (Weeks 1-5). The final exam is cumulative and will cover all materials taught in the class, including ANOVA and Chi square tests of significance, correlation and regression.

*Classroom Etiquette:* Full and complete attendance is required for learning the material in this course. There will be 12 lectures and 12 tutorials. . Students are expected to arrive at class on time and to turn off all electronic communication devices. Each class is an hour and fifty minutes, each tutorial is one hour long. By remaining in the course, you are signaling your commitment to attend class (on time) and satisfy all requirements. I realize that many students work or have other obligations. However, if you have a scheduling conflict, I encourage you to consider other course options to avoid such conflicts. Please note if you have paid employment, you must make the necessary job-related scheduling arrangements to meet this course's requirements—including meetings with TA during scheduled office hours to review course materials and tests. Excessive lateness and other problematic behaviours (including in your interactions with and emails to me or the TA) will not be tolerated and will result in mark penalties (5 marks of your final mark per incident) or possible punitive action at the discretion of the instructor. Any offensive or inappropriate content on tests, exercises, or any other course materials will result in the mark of a zero (0) for the entire test or in-class exercise

and may also result in possible additional punitive action at the discretion of the instructor.

*Lecture Topic Outline & Reading List:*

| Date | Subject | Required Reading |
|---|---|---|
| Lecture 1, Jan 7 | Overview of course; introduction to the major types of statistical procedures; levels of measurement | Chapter 1 |
| Lecture 2, Jan 14 | Creating tables and graphs; frequency distributions; crosstabulations | Chapters 2 |
| Lecture 3, Jan 21 | Descriptive statistics; measures of central tendency & dispersion; z scores | Chapter 3 |
| Lecture 4, Jan 28 | Bivariate analysis; chi square and statistical significance; hypothesis testing | Chapter 4 |
| Lecture 5, Feb 4 | Inferring from a sample to a population; standard error; confidence intervals<br>**Assignment 1 is due in tutorials this week** | Chapter 5 |
| Lecture 6, Feb 11 | **Mid-Term: Bring PEN, Calculator and Student ID** | |
| Lecture 7, Feb 25 | Testing the differences between sample means; t-tests and ANOVA | Chapter 6 |
| Lecture 8, March 4 | Correlation and bivariate linear regression; Guest lecture on data visualization (Gregory Eady, founder of Vote Compass www.votecompass.ca) | Chapters 7 |
| Lecture 9, March 11 | Inference and regression; statistical significance; correlation matrices | Chapter 8 |
| Lecture 10, March 18 | Review of regression; dummy coding of independent variables | Chapter 9 |
| Lecture 11, March 25 | Interpreting regression outputs; the logic of controlling; beta coefficients; nested regression models | Chapters 10-11 |
| Lecture 12, April 1 | Review<br>**Assignment 2 is due in tutorials this week** | Chapter 1-11 |
| [insert date] | **Make-up midterm, location and time** | |

*Make-up Midterm:* The privilege of taking a make-up midterm will only be granted in cases where there is legitimate, university-approved evidence of very serious illness or family emergency. Three types of documentation are considered "official": a Verification of Student Illness or Injury form, a college registrar's letter, and a letter from Accessibility Services. Excuses like "workloads, stress, work, bad weather" and so on are not acceptable. Students must provide official documentation that is dated on the day of or day before the test (not after the test). Do not write the test and then later request a make-up or accommodation. If you miss the test, you must email me within 48 hours of the test and include the scanned official documentation (fully legible and complete with contact information). There will be one (1) date for make-up midterms: XXXX (no exceptions). I am strict about make-up tests to insure that the process is fair for all students. Students having serious academic-, personal- or health-related problems during the semester should seek immediate guidance from their advisor, registrar, or other support services on campus before these problems interfere with course requirements.

*Final Exams:* Final examinations are scheduled, administered, and governed by the policies set out by the Office of the Registrar (see the Faculty of Arts and Science Calendar). Any student granted a deferral by the Office of the Registrar will be required to write a deferred examination at the next exam-writing session scheduled by the Office of the Registrar.


*Accessibility:* Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please approach accessibility Services. Students seeking support require medical documentation and an intake interview with a disability advisor to discuss their individual needs. To schedule a registration appointment with a disability advisor, please call the Centre at 416-978-8060. See also http://www.accessibility.utoronto.ca.

*Academic integrity:* The University of Toronto treats cases of academic misconduct very seriously. Academic integrity is a fundamental value of learning and scholarship at the UofT. All suspected cases of academic dishonesty will be investigated following the procedures outlined in the *Code of Behaviour on Academic Matters*. If you have any questions about what is or is not permitted in this course, please do not hesitate to contact me.

*Grade appeals:* The instructor and teaching assistants take the marking of assignments very seriously, and will work diligently to be fair, consistent, and accurate. Nonetheless, mistakes and oversights occasionally happen. If you believe that to be the case, you must adhere to the following rules:
- If it is a mathematical error simply alert the TAs of the error.
- In the case of more substantive appeals, you must wait at least 24 hours after receiving your mark. If you wish to appeal, you must submit to the instructor a written explanation of why you think your mark should be altered. Please note statements such as "I need a higher grade to apply to X" are not compelling. Also, please note that upon re-grade your mark may go down, stay the same, or go up. *You have 30 days after receiving a mark to appeal it.*

*Electronic communication and course website:* The course website prepared on the Blackboard system will contain the course syllabus, all assignments, links of interest, and course announcements. Students are responsible for the content of all course materials and for checking their official utoronto.ca email address regularly. Emails sent to the utoronto.ca email address on file are deemed to have been received. Discussion boards will be enabled on the course web site. All students using these boards are expected to behave respectfully towards their classmates.

   *You* are encouraged to use email to enhance your learning and experience in the course. With that said, it is essential that you follow a few rules:
- All course communication should be conducted through Blackboard or your Utormail account.
- All emails must include the course code SOC202 in the subject line, and be signed with the student's full name and student number.
- All questions related to the course material must be sent to your TA. Any other email queries should be addressed to instructor**.**
- Students must adhere to proper email etiquette. Emails that are impolite or incoherent do not warrant a response. Be mindful that you are not the only student in this class.
- Before emailing questions, decide whether email is the most appropriate form of correspondence for your question(s). Some questions are best asked face-to-face.
- Emails that ask questions that are answered in the course syllabus or website (e.g., "how much is assignment X worth") will not receive a response. Note that while email communication is convenient, it is also a permanent record of your communication exchange.

I encourage you to post questions to the discussion board prior to emailing the TA. If the TA believes that their response to your emailed question is useful for the rest of the class, the TA is permitted to respond by asking you to post your question(s) to the discussion board so that he/she can respond to you there. Emails from students will generally be answered within 48 hours of receipt. If you have urgent questions regarding the test material, it is generally not a good idea to wait until the day before your test to ask them via email. The TAs might not be able to respond to you in time for your test, depending on the number of emails they receive that day. Ask questions in tutorials or office hours and try to utilize the discussion board as much as possible.