THE UNIVERSITY OF CALGARY
FACULTY OF ARTS
DEPARTMENT OF SOCIOLOGY
(soci.ucalgary.ca)

SOCIOLOGY 315-01 (Introductory Social Statistics II)

Course Outline, Fall 2017

Safewalk/Campus Security: 220-5333, ANYTIME (Campus Security can also be contacted from any of the "Help" phones located around Campus)

This course makes use of Desire2Learn to communicate information to students. To access D2L go to: d2l.ucalgary.ca OR my.ucalgary.ca

Instructor: Tom Langford   Office: SS 1006   langford@ucalgary.ca
Office Hours: Mondays and Fridays, 3:30 to 4:30 p.m., or by appointment (please email a request). NOTE that office hours are **cancelled** on Thanksgiving (Monday October 9), Friday October 13, Friday October 27, and during the Mid-Term Break (Friday November 10 and Monday November 13).
Cancelled Lecture: Friday October 13 (Langford will be attending a conference)

Email guidelines: Please use email to inform me of something important (e.g., you are sick and will be missing the mid-term test), to ask a question that I can answer with a simple Yes or No (e.g., Is the confidence interval for proportions covered on the mid-term test?) or to book an appointment outside of the scheduled times for office hours. For more complicated questions and discussions, please speak to me in person.

Teaching Assistant: Victoria Stamper
Contact information and office hours for Victoria will be posted on D2L.

COURSE DESCRIPTION

This is the second of two introductory courses on the basic statistical logic and techniques that are employed in quantitative social research using data from survey research. It reviews: (A) inferential statistical logic and techniques; and (B) correlation and simple linear regression. It then covers (C) multivariate cross-tabulation analysis; (D) multiple regression analysis; (E) dummy variable regression (in which nominal-level explanatory variables are included in a regression model through the creation of dummy variables); (F) the whys and wherefores for the multiple indicator measurement of concepts, including checks for measurement reliability and validity; (G) testing whether two explanatory variables statistically interact in affecting a dependent variable, and if they do, how to interpret the statistical interaction (both when conducting a multivariate cross-tabulation analysis or a multiple regression analysis); (H) using path analysis to distinguish indirect causal effects from direct causal effects; and (I) understanding published research that reports multiple regression analyses.

The instructor assumes that students are familiar with the descriptive statistics for one and two variables that are covered in the prerequisite course, SOCI 311, and have been introduced to inferential statistical logic and techniques. Students will learn the material through lectures, readings, problem solving, participation in laboratory sessions, completion of assignments and studying for tests. A major objective of the labs is to increase students' proficiency when analyzing sociological data using statistical software packages. For most of the computer assignments in this course you will be asked to use **Stata**. However on at least one occasion I will ask you to use the Statistical Package for the Social Sciences (SPSS). (The advantage of using two different packages is that you can list both of them on your resume!)

In general, students should be able to deal with the material in this course if they attend all lectures and labs, approach the readings systematically, complete assigned problems every week, carefully and thoroughly complete the assignments on time, and are sure to ask questions on any points which puzzle them. Students will find that the material in this course gets progressively more difficult throughout the term. Consequently, it is imperative that you do not fall behind in your work.

CLASSROOM DECORUM

We should all conduct ourselves in ways that are respectful of everyone else in our learning environment. How this general principle applies to coming to class late, using electronic devices during lectures, chit chatting with the person next to you, attempting to multitask during lectures, etc., will be discussed at our first class and whenever needed throughout the term. As the lecturer, I will let you know (often right on the spot) if something you are doing disrupts my concentration. In addition, since you should be paying attention to lecture material at all times, I will not hesitate to ask you a question coming out of the flow of the lecture, whether you seem to be paying attention or not! Always be prepared to participate since you never know when I will call upon you.

REQUIRED READING MATERIALS

(1) Allison, Paul D. 1999, *Multiple Regression: A Primer*. Thousand Oaks, CA: Pine Forge Press. [Available in the bookstore.]

(2) Longest, Kyle C. 2015. *Using **Stata** for Quantitative Analysis, second edition*. Thousand Oaks, CA: Sage.
I have not ordered paper copies of this book since an electronic version is available in a number of different formats -- Kindle, Google Play, etc. You are required to order an electronic version OR a paper version. Please note that the Kindle version and Google Play versions are quite a bit cheaper than a paper copy. At the same time, because some of the screen shots of **Stata** output in the manuscript are a bit fuzzy and small, they come up as quite fuzzy in the Kindle version I am using. This is the downside of working with an electronic version. Given that you will usually be using Longest at the same time as you have **Stata** open on your computer, this is not a huge problem.

(3) Langford, Tom. *Handouts for SOCI 315 Lectures*. [A booklet of handouts will be provided at the beginning of the term. You should bring the booklet to each and every class. The pdf of the booklet will be posted on D2L.]

ASSIGNED READINGS The list of assigned readings will be posted separately on D2L.

RECOMMENDED REFERENCE SOURCE

Please have on hand any introductory statistics textbook that covers the basics of descriptive and inferential statistics for one and two variables. In particular you want to locate an introductory statistics textbook that covers: hypothesis testing, the correlation coefficient and bivariate linear regression. The textbook should also include the normal curve, t and F tables. Whichever textbook you used in SOCI 311 (or an equivalent course) will be fine. If you don't have that textbook on hand, borrow an introductory statistics textbook from the library. The reasons you should have an introductory statistics textbook on hand are: (a) so that you can review a basic textbook presentation of a concept (such as the null hypothesis or the standardized regression coefficient) if you are puzzled by something I say in class or something that Allison writes; and (b) so that you can do inferential statistical calculations and tests using the normal curve, a t curve or a F curve.

STUDENT EVALUATION

(1) **Three Assignments**
    (A) <u>Due Dates</u>: Assignments are due on:
1. Friday 29 September at 14:00 at the beginning of class.
2. Friday 27 October at 14:00 at the beginning of class.
3. Friday 1 December at 14:00 at the beginning of class.
    (B) <u>Working Time</u>: a minimum of nine days, including two lab sessions
    (C) <u>Value</u>: .... 21% (each valued at 7%)

(2) **Mid-Term Test # 1**
    (A) <u>Time</u>: Wednesday 11 October, 15:00 to 17:30
    (B) <u>Content</u>: All readings, lectures, lab material, assignments and exercises up to 11 October. This test is 'closed book' although a list of formulae will be provided. Stand-alone calculators are permitted, but not those on phones.
    (C) <u>Value</u>: .... 15% or 25%, whichever is most favourable to you

(3) **Mid-Term Test # 2**
    (A) <u>Time</u>: Wednesday 8 November, 15:00 to 17:30
    (B) <u>Content</u>: All readings, lectures, lab material, assignments and exercises up to 8 November, with an emphasis on material covered after the first mid-term test. This test is 'closed book' although a list of formulae will be provided. Stand-alone calculators are permitted, but not those on phones.
    (C) <u>Value</u>: .... 15% or 25%, whichever is most favourable to you

(4) Computer Quiz

    (A) <u>Time</u>: Wednesday 6 December, 15:00 to 16:30

    (B) <u>Location</u>: Arts Faculty Computer Lab

    (C) <u>Content</u>: All computer work covered in labs between 13 September and 29 November. This computer quiz is 'open book.'

    (D) <u>Value</u>: 4%

(5) Registrar-Scheduled Final Examination

    (A) <u>Time</u>: To be scheduled by the Registrar's Office. Please do not make travel plans for December until after the Registrar's exam schedule is released. No requests to write the final examination in a special time slot will be entertained.

    (B) <u>Content</u>: The final examination is cumulative. You will be tested on all readings, lectures, lab material, assignments, exercises and test questions from the beginning of the course until the end, with an emphasis on material covered after the second mid-term test. The final examination is 'closed book' although a list of formulae will be provided. Stand-alone calculators are permitted, but not those on phones.

    (C) <u>Value</u>: .... 25%, 35% or 45%, whichever is most favourable to you

LETTER GRADE ASSIGNMENT

       At the end of the course numerical marks are totalled and a final letter grade is assigned on the following basis:

Percentage Range	Letter Grade
49 or less	F
50-53	D
54-58	D^+
59-62	C-
63-66	C
67-71	C^+
72-75	B-
76-79	B
80-84	B^+
85-89	A-
90-94	A
95 or higher	A^+

IMPORTANT NOTES

(1) <u>Late Penalty</u>. Except in the cases of documented illness, or extenuating circumstances brought to the teaching assistant's attention before the due date of an assignment, a penalty of 20% of the assigned mark per day (prorated for part days) will be assessed on late assignments.

(2) A student who has a legitimate reason for being unable to write a scheduled mid-term test must discuss an alternative course of action with the instructor. At his discretion, the instructor will transfer the percentage weight to another component of the course, or set a make-up test. Make-up tests must be written as soon as possible at a scheduled Department of Sociology make-up test session.

(3) All requests for deferral of a course component due to health reasons must be accompanied by written documentation as outlined in the University Calendar and should be obtained while the student has the health issue rather than after recovery. Please note that travel arrangements, holiday plans, misreading the syllabus, and scheduling conflicts with other classes or employment are not normally valid reasons for requesting a deferral. A deferral will not be granted unless, in the instructor's opinion, a just cause for the deferral has been shown and documented by the student.

(4) <u>How to arrange for deferred work at the end of a term.</u>

Deferred Final Exam Form: Please note that requests to defer a Registrar-scheduled final exam are dealt with through the Registrar's Office. Further information about deadlines, and where paperwork should be taken, is available on the form, which can be found at: https://www.ucalgary.ca/registrar/student-forms

Deferred Term Work Form: Deferral of term work past the end of a term also requires a form to be filled out. It's available at https://www.ucalgary.ca/registrar/student-forms

Once an extension date for deferred term work has been agreed between instructor and student, the form should be taken to the Arts Students' Centre (SS 102) for approval by an Associate Dean (Students).

(5) The quality of a student's writing is a factor in the evaluation of a student's work in this course.

(6) "Intellectual honesty is the cornerstone of the development and acquisition of knowledge" (see section K.4 of the Academic Regulations in the 2017-18 *Calendar*, found on the U. of C. website). Please review the University of Calgary's policies for dealing with student misconduct, particularly plagiarism and cheating, found in section K.5 of the Academic Regulations in the *Calendar*.

(7) Handing in assignments outside of class, return of tests and assignments, and release of final grades.

1. When students are unable to submit assignments as scheduled in class, they should make arrangements to hand in the assignments directly to the teaching assistant. Papers will not be accepted in the main Sociology Department office.
2. Assignments and mid-terms will not be returned through the main Sociology Department office. The Freedom of Information and Privacy (FOIP) legislation disallows the practice of having students retrieve assignments from a public place (i.e. outside an instructor's office, the department office etc.). Students who want any of their work returned by mail must supply a stamped, self-addressed envelope to the instructor. Otherwise unclaimed assignments or mid-terms will be available for pick-up only at a scheduled class/lab or from the instructor's office during scheduled office hours or by appointment.
3. Final grades are not posted by the Sociology Department. They are available only online.

(8) Ethics of Research**:** Students are advised that any research with human subjects -- including any interviewing (even with friends and family), opinion polling, or unobtrusive observation -- must have the approval of the Faculty Ethics Committee. In completing course requirements, students must not undertake any human subjects research without discussing their plans with the instructor, to determine if ethics approval is required.

(9) Academic Accommodation
Students who require academic accommodation because of a disability or health condition need to register with Student Accessibility Services (MSC 452, telephone 220-8237) in accordance with the Student Accommodation Policy found at http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf. Academic accommodation letters need to be provided to course instructors no later than fourteen (14) days after the first day of class. It is a student's responsibility to register with Student Accessibility Services and to request academic accommodation, if required.

Students needing an Accommodation based on a Protected Ground other than disability or health condition should communicate this need, preferably in writing, to the course instructor.

(10) The grades for a course component may be scaled to maintain equity among sections and to conform to departmental norms.

(11) ***Emergency evacuations.*** In the case of fire or other emergency evacuation of our classroom in Math Sciences, please proceed to the emergency assembly point at Social Sciences -- Food Court. In the case of fire or other emergency evacuation of the Arts Faculty Computer Lab, please proceed to the emergency assembly point at Professional Faculties -- Food Court. You can check the emergency assembly point locations for all of your classes at: http://www.ucalgary.ca/emergencyplan/assemblypoints

(12) **Student Representation**. The 2017-18 Students' Union VP Academic is Tina Miller (suvpaca@ucalgary.ca). For more information, and to contact other elected officials with the Student's Union, please visit this link: https://www.su.ucalgary.ca/about/who-we-are/elected-officials/ You may also wish to contact the Student Ombudsperson for help with a variety of University-related matters: http://www.ucalgary.ca/ombuds/contact

(13) **Safewalk**. The University of Calgary provides a "safe walk" service to any location on Campus, including the LRT, parking lots, bus zones, and campus housing. For Campus Security/Safewalk call 220-53333. Campus Security can also be contacted from any of the "Help" phones located around Campus.