SOCI 315: Introductory Statistics II

The University of Calgary, Faculty of Arts, Department of Sociology
Course Outline, Winter Semester, 2017

Instructor Alex Bierman, Ph.D. **Office:** SS 902 **Phone**: 403-220-6226 (**email is the best way to reach me)** **E-mail:** aebierma@ucalgary.ca **Office Hours:** Tuesdays & Thursdays 9:30 am – 10:30 am **Note that I may also be available by Skype on other days.** ---------- **Teaching Assistants** TBA	**Lecture Schedule**: 11:00 am – 12:15 pm Tuesdays and Thursdays MFH 160 **Lab Schedule**: 3:30 pm - 6:20 pm, Thursdays Tri-Faculties Lab or MFH 160 **Labs will typically be held in the Tri-Faculties Lab.** Mid-terms will usually be administered during lab hours, in which case they will be in MFH 160. **Final**: Registrar scheduled

Required Texts

Mehmetoglu, Mehmet and Tor Georg Jakobsen. 2017. *Applied Statistics Using Stata: A Guide for the Social Sciences*. Sage Press. (ISBN: 9781473913233)

Readings based on articles available through the library website may also be assigned.

Course Description

This course will focus on multivariate statistics. It will include topics such as multiple regression, dichotomous predictors, non-linear relationships, tests of mediation, and interaction analysis. Please note that this course will expand on the material learned in SOCI 311. We will begin with a brief review of concepts from SOCI 311 before introducing new topics, but students for whom the current 311 curricula is unfamiliar may need to perform additional work to become sufficiently familiar with the background material.

Course Objectives

At the end of this course, students should have knowledge and understanding of the application of the basic OLS regression model to the study of sociologically-based research questions. Students should be familiar with the concept of statistical control and why statistical controls are commonly used in the social sciences, as well as employ statistical control in an OLS context using the Stata statistical program. Students should also be able to identify and employ a dichotomous predictor or set of dichotomous predictors in a multivariate regression model using Stata. Students should also have an appreciation of the way that mediation can be used to explain associations, as well as how mediation can be tested using progressive adjustment and

specific statistical tests. Moreover, students should be familiar with the purpose of interactions to test moderation, and understand how to employ these interactions in Stata. Students should also be prepared to identify non-linear associations between two continuous variables, and use quadratic modeling techniques in Stata to address non-linearity.

Grading System

A+ = 95 and over	B+ = 80-84.9999	C+ = 67-71.9999	D+ = 54-58.9999
A = 90-94.9999	B = 76-79.9999	C = 63-66.9999	D = 50-53 .9999
A- = 85-89.9999	B- = 72-75.9999	C- = 59-62.9999	F = 49.9999 and lower

Grade Distribution

Labs	25%
Exam 1	25%
Exam 2	20%
Final Exam (**Cumulative**)	30%

If an opportunity for extra credit arises, this opportunity will be given to the class as a whole. Individual opportunities for extra credit or to make up points lost due to errors on an exam will not be allowed. Consistent with departmental policy, class grades may be adjusted to keep with departmental norms.

Staying in Contact

Class announcements may occasionally be sent out over e-mail, so you'll need to make sure that the university has your correct e-mail address and that your e-mail account is in working order. We are happy to meet with students, but except for cases in which we have instructed you to email something, please contact us by email for administrative purposes only. For instance, you may email us to schedule an appointment outside of office hours. The nature of class material is complex enough to preclude simple answers regarding substantive matters over email in most cases. When e-mailing, please put "SOCI 315" in the subject line of your e-mail. We will make every effort to reply to your e-mails within 24 hours, but it may take up to 24 hours to respond.

Course Format

The course setup consists of two 1 hour and 15 minute class lectures per week and one three-hour lab section per week.

The purpose of the lab is to practice with your TA's assistance questions of the type that will appear on your exam. We will also examine how to use Stata to analyze data with the procedures covered in class.

Note: It is possible that concepts covered in lab may appear on exams. You should plan to attend both the lab and the lecture, and are responsible in all exams for any material presented in either lecture or lab.

Lecture notes

I will post PowerPoint slides on the course D2L for most of the class lectures, and you should print out these slides and bring them to class or have them available on an electronic device capable of note-taking. You will still need to take notes, even if you have the PowerPoint slides. There are no lecture notes besides the PowerPoint slides, so if you miss class you'll need to get the additional lecture notes from another student.

Reading Assignments

Reading assignments will be given out over email as the class progresses. It is the student's responsibility to keep track of the reading assignments.

Exams

Only the final exam will be expressly cumulative, but all exams may be indirectly cumulative because they are likely to build on previous material. You will be permitted one 8 1/2 by 11 inch sheet (front and back) of notes during each exam. Exams may include a mixture of True/False, multiple choice, short answer, and calculation problems. **You can expect to be required to interpret Stata output on the exams.**

Exams will be administered during your lab periods. The class will typically have two hours to take an exam. If you arrive late for the exam, you will only have the amount of time remaining allotted for the exam. For instance, if you show up half an hour after an exam is handed out, you will have only 90 minutes to take the exam. Once you begin an exam, it is your performance during the allotted time which will be used to determine your grade. You will not be allowed to retake the exam, sections of the exam, or complete at a later date problems you may not have answered. You also will not be allowed to take alternative sections of an exam or an alternative exam and substitute or combine your performance on the exam with alternative grades. If you believe that you may have an emergency which will interfere with your performance on the exam, or you arrive late because of an emergency, you need to talk to me about it before you take the exam. Once you begin the exam, it is your performance on that exam, during the time allotted for the exam, which will determine your grade. The only exception to this policy is if you must be hospitalized while you are taking the exam.

Exam dates are February 9th for exam 1 and March 16th for exam 2. Please note that these exam dates are *tentative*, and I will confirm the dates at least a week before the respective exam. For each exam, you will be allowed one page of notes, front and back, scratch paper, a writing utensil, and a calculator. Your calculator should have exponent (square) and square root functions. Some calculators can have some unusual displays or function keys, so it's a good idea to make sure you can read your calculator output before an exam. You cannot use a calculator on your phone, laptop, or tablet, but I do not care if you have an otherwise advanced calculator. We will also bring calculators in case you need one, although they will be relatively basic.

Labs

Labs will serve two purposes. First, this will be your opportunity to attempt questions of the type you will see on the exams, but with a T.A. available to help you. In addition, you will learn and apply the Stata computer program to analyze data using statistics being covered in class. Lab assignments will be a mix of work problems and Stata exercises. Labs will typically be turned in through D2L the week after lab. Due dates will be on the lab assignment, and if the lab

is turned in after the due date, 50% of the total marks possible will be deducted from the lab before any marks are deducted for errors. **Because a central purpose of the labs is to prepare you for the exams, no lab assignments will be accepted after the final day of classes.**

Academic Dishonesty

Instances of academic dishonesty will be referred to the faculty for adjudication and possible punishment. Using work which is not your own is academic dishonesty. Academic dishonesty of this type includes: Having someone else do work and claiming the work as your own, or copying other students' work. Other types of academic dishonesty include gaining access to materials before they are given. This is not an exhaustive list of activities which may fall under the category of academic dishonesty. If you are not sure whether an action would be academic dishonesty, please ask Dr. Bierman before you take this action.

Grade Reappraisals

Within two weeks of the date the exam/assignment is returned, students seeking reappraisal of examinations or assignments must either submit a written response to the instructor explaining the basis for reconsideration of one's mark, or meet with the instructor and discuss the basis for reconsideration. In the event of an in-person meeting, the instructor may not make an immediate decision regarding a change of grade. It should be noted that a re- assessed grade may be raised, lowered, or remain the same. Please note that it is Dr. Bierman, not a TA, who is responsible for all grade reappraisals.

Handing in Papers, Assignments

1. The main Sociology Department office does not deal with any course-related matters. Please speak directly to your instructor.
2. **Protection of Privacy:** The Freedom of Information and Protection of Privacy (FOIPP) legislation does not allow students to retrieve any course material from public places. Anything that requires handing back will be returned directly during class or office hours. If students are unable to pick up their assignments from the instructor, they provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.
3. Final grades are not posted by the Sociology Department. They are only available online.

Ethics 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.

Academic Misconduct

Please refer to the website listed below for information on University of Calgary policies on Plagiarism/Cheating/Other Academic Misconduct:
http://www.ucalgary.ca/pubs/calendar/current/k-2-1.html

Deferrals

When possible, please provide advance notice if you are unable to write an exam or complete/turn-in assignments on time. 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. Deferrals will be allowed in the following circumstances: illness, domestic affliction or religious conviction. Travel arrangements, misreading the syllabus, and scheduling conflicts with other classes or employment are not valid reasons for requesting a deferral. Deferrals will not be granted if it is determined that just cause is not shown by the student.

If you have missed a test for a legitimate reason, the instructor can require you to write a "make up" test as close in time to the original test as possible or can choose to transfer the percentage weight to another course component. If the instructor schedules a "make up" test for you, its date and location will be at the convenience of the Department of Sociology.

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/files/registrar/deferred_termwork15_0.pdf

Once an extension date has been agreed between instructor and student, the form should be taken to the Faculty of Arts Program Information Centre (SS 110) for approval by an Associate Dean (Students).

Student Representation

The 2016-17 Students' Union VP Academic is Alicia Lunz (suvpaca@ucalgary.ca). The Faculty of Arts has four SU representatives who may be contacted at any of the following email addresses: arts1@ucalgary.ca, arts2@ucalgary.ca, arts3@ucalgary.ca, and arts4@ucalgary.ca. You may also wish to contact the Student Ombudsperson for help with a variety of University-related matters:
http://www.ucalgary.ca/provost/students/ombuds/role

Emergency Evacuations

In the case of fire or other emergency evacuation of this classroom, please proceed to the assembly point at Education Block - Food Court.

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 220-5333. Campus Security can also be contacted from any of the "Help" phones located around Campus.

Academic Accommodation

Students needing an Accommodation because of a Disability or medical condition should contact Student Accessibility Services (MC 293, phone 403-220-8237) in accordance with the Procedure for Accommodations for Students with Disabilities available at http://ucalgary.ca/access/. Please provide academic accommodation letters to the instructor as early in the semester as possible and no later than two weeks after the course begins.