



# UNIVERSITY OF CALGARY

**Department of Sociology  
SOC 315**

**Introductory Social Statistics II  
Winter 2018**

**Lectures: TR 9:30-10:45, MS 211**

**Labs: R 3:30-6:15, Tri Faculties Lab (or MS 211 when a test is held)**

## **Instructor Information**

Instructor:	Naomi Lightman
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Office hours:	Tuesdays 2pm-3:30pm, or by appointment
Office location:	928
Course web site:	D2L
Teaching Assistants:	Victoria Stamper: <a href="mailto:tanysha.stamper@ucalgary.ca">tanysha.stamper@ucalgary.ca</a> Nazario Robles Bastida <a href="mailto:nroblesb@ucalgary.ca">nroblesb@ucalgary.ca</a>

## **Course Description**

This course focuses on multivariate statistics. It includes topics such as multiple regression, dichotomous predictors, non-linear relationships, interaction analysis and logistic regression. The course will briefly review and expand on the material learned in SOCI 311 (Introductory Social Statistics I). Each week will consist of two 1 hour and 15 minute lectures (on Tuesday and Thursday, MS 211) and one two hour and forty-five minute lab (Thursdays, Tri-Faculties Lab). The lab will provide students with hands-on experience analyzing and applying the key concepts from lecture using a large sample survey and the statistical software program SPSS. Students for whom the current 311 curricula is unfamiliar may need to perform additional work to become sufficiently familiar with the background material.

## Goals and Learning Objectives

At the end of this course students will be able to:

- **Understand and apply** basic OLS regression to the study of sociologically-based research questions;
- **Be familiar** with the concepts of statistical control, mediation and interaction, and understand why these are commonly used in the social sciences;
- **Employ** a dichotomous predictor in a multivariate regression model using SPSS and run and analyze regression models with dichotomous outcome variables; and
- **Articulate** their own, methodologically grounded opinions about contemporary developments related to issues covered in the course.

## Reading Materials

The textbook has been selected to enhance your knowledge and understanding of the key issues covered in the course. We will draw on the textbook in lectures, labs, and in the assignments for this course. It is therefore important to complete the required readings each week. Knowledge of required readings will be evaluated and graded as part of tests and labs. Students are expected to have done the required readings *by the beginning of Tuesday's class* for each week as per the course schedule.

## Required Text

1. Linneman, Thomas J. 2014. *Social Statistics: Managing Data, Conducting Analyses, Presenting Results*, 2<sup>nd</sup> Edition. New York: Routledge.

## Grade Distribution

Labs (5 x 5%)	25%
Exam 1	20%
Exam 2	25%
Final Exam ( <b>Cumulative</b> )	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.

## Grading System

A+ = 90 and over	B+ = 77-79	C+ = 67-69	D+ = 55-59
A = 85-89	B = 73-76	C = 63-66	D = 50-54
A- = 80-84	B- = 70-72	C- = 60-62	F = 0-49

## Course Format

The course setup consists of two 1 hour and 15 minute class lectures per week and one 2 hour and 45 minute lab section per week (Besides on weeks where there is a test when no labs will be held).

The purpose of the lab is to practice with your TA's assistance questions of the type that will appear on your exam. The labs will also examine how to use SPSS 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.

### **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 SPSS 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. 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 Feb. 8 for exam 1 and March 22 for exam 2. The date of the Final Exam is TBD. 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.

### **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 SPSS computer program to analyze data using statistics being covered in class. Lab assignments will be a mix of work problems and SPSS exercises. Labs will typically be turned in through D2L the week

after there are due. 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.**

### **Course Schedule**

*Please note: Every attempt will be made to follow this schedule, but it is subject to change at the discretion of the instructor.*

#### ***Week 1 – Jan 9 & 11. Levels of Measurement and Bivariate Associations; Descriptive Statistics and Data Visualization***

Note: The first lecture will provide an overview of the course. Students are expected to have read the course syllabus; course policies, assignments and expectations will be reviewed only briefly, on a Q&A basis. This week will consist of review from SOCI 311.

- Review Linneman Chapters 1-6, as needed.
- Lab 1a

#### ***Week 2 – Jan. 16 & 18. Bivariate Regression***

- Linneman Chapter 7.
- Lab 1b
- *Lab 1a and 1b is due on Jan. 19<sup>th</sup> on D2L by midnight*

#### ***Week 3 - Jan. 23 & 25. Hypothesis Testing and Bivariate Regression***

- Linneman Chapter 8.
- Lab 2a

#### ***Week 4 – Jan. 30 & Feb. 1. Introduction to Multiple Regression & Hypothesis Testing***

- Linneman Chapter 10.
- Lab 2b
- *Lab 2a and 2b is due on Feb. 2<sup>nd</sup> on D2L by midnight*

#### ***Week 5 –Feb. 6 Review (Class cancelled Feb 8)***

*Note: Exam #1 will be held instead of the lab on Feb. 8, in Rm. MS 217 from 3:30-5:30pm.*

#### ***Week 6 – Feb. 13 & 15. Categorical Predictors and Multiple Regression***

- Linneman Chapter 9.
- Lab 3a

***Week 7 –Feb. 27 & March 1. Testing Group Differences in Slopes***

- Linneman Chapter 11.
- Lab 3b
- *Lab 3a and 3b is due on March. 2<sup>nd</sup> on D2L by midnight*

***Week 8 – March 6 & 8. Path Analysis, Testing Indirect Associations***

- Linneman Chapter 14.
- Lab 4a

***Week 9 – March 13 & 15. Non-Linearity and Other Model Problems***

- Linneman Chapter 15.
- Lab 4b
- *Lab 4a and 4b is due on March 16<sup>th</sup> on D2L by midnight*

***Week 10 – March 20 Review (Class Cancelled March 22)***

Note: Exam #2 will be held instead of the lab on Thursday March 22, in Rm. MS 217 from 3:30-5:30pm.

***Week 11 –March 27 & 29. Interactions***

- Linneman Chapter 12.
- Lab 5a

***Week 12 – April 3 & 5. Logistic Regression***

- Linneman Chapter 13.
- Lab 5b
- *Lab 5a and 5b is due on April 6<sup>th</sup> on D2L by midnight*

***Week 13 – April 10. Review (Class Cancelled April 12)***

- No lab

**Grade Reappraisal**

Within two weeks of the date the test/assignment is returned, students seeking reappraisal of tests or assignments must submit a written response to the instructor explaining the basis for reconsideration of one's mark. The instructor will reconsider the grade assigned and will then book a time with the student

to discuss his or her work and rationale. It should be noted that a re-assessed grade may be raised, lowered, or remain the same.

### **Email**

Feel free to contact me over email at any time. Please put your course number in your email's subject line, and include a proper salutation, your full name, student ID, and a proper closing in the body of your email. All emails violating customary email conventions will be ignored. All other emails will be answered within two business days. I do not answer emails over the weekend. Please take that into account when emailing me questions pertaining assignments or tests. If you have a course-related question, please check the course outline first. Questions that can be answered by consulting the course outline will not be answered. Also, please e-mail me for administrative purposes only, for example to set up an appointment. Please do not use e-mail as a replacement for an office visit, if there is something you want to discuss in depth. Questions about the course content and readings, concerns about grades, or any other personal issues should be dealt with in person during my office hours.

### **Handing in Papers, Assignments**

1. The main Sociology Department office does not deal with any course-related matters. Please speak directly to me.
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](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 2017-18 Students’ Union VP Academic is Tina Miller ([suvpaca@ucalgary.ca](mailto: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](mailto:arts1@ucalgary.ca), [arts2@ucalgary.ca](mailto:arts2@ucalgary.ca), [arts3@ucalgary.ca](mailto:arts3@ucalgary.ca), and [arts4@ucalgary.ca](mailto: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/ombuds/contact>

### **Emergency Evacuations**

In the case of fire or other emergency evacuation of this classroom, please proceed to the assembly point at **MS 211**. Please check these assembly point locations for all of your classes at:

<http://www.ucalgary.ca/emergencyplan/assemblypoints>

### **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**

The student accommodation policy can be found at: [ucalgary.ca/access/accommodations/policy](http://ucalgary.ca/access/accommodations/policy).

Students needing an Accommodation because of a Disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities [ucalgary.ca/policies/files/policies/student-accommodation-policy](http://ucalgary.ca/policies/files/policies/student-accommodation-policy).

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

### **Classroom Etiquette**

Students are expected to arrive at class on time. Laptop usage is allowed in class, but should be used for notes only. Other uses (e.g., emailing, web surfing) will result in the student being required to turn off the laptop.

- Videotaping and recording lectures is strictly forbidden without written permission from the instructor.