

# Sociology 315: Introductory Social Statistics II

The University of Calgary, Faculty of Arts, Department of Sociology  
Course Syllabus, Winter 2016

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	<i>Please note that email is the only way to reach me.</i>		
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<b>Teachings Assistant:</b>	Stefan Lewis	<b>Office:</b>	SS 917
<b>Email:</b>	<a href="mailto:lewiss@ucalgary.ca">lewiss@ucalgary.ca</a>	<b>Office Hours:</b>	T 3:00pm-5:00pm
<b>Classroom:</b>	SB 148	<b>Class Hours:</b>	TR 9:30am-10:45am
<b>Lab Location:</b>	SS 018 (AFCL) or SB 148 (Exams)	<b>Lab Hours:</b>	R 3:30pm-6:20pm

## Prerequisites

SOCI 311 (minimum passing grade: C-) or consent from the Department of Sociology.

## Course Description

This course is the second of two required statistics courses in Sociology at the U of C. Please note that this course expands on the material covered in SOCI 311, and assumes that students are familiar with this material (up to, and including, bivariate regression). This course also assumes that students have a basic familiarity with the statistical software package used in this course: Stata.

We will begin with a review of key concepts before introducing new material. This course will focus on multivariate analyses and other extensions of bivariate OLS regression. New topics will include multiple regression, non-linear relationships, mediation analysis, moderation analysis, logistic regression, and scale construction.

## Course Objectives

This course (in combination with SOCI 311) will provide students with the tools necessary to conduct, take, and critically assess quantitative research in the social sciences. By the end of this course, students will be able to perform both descriptive and inferential data analysis using the statistical package Stata, and to interpret and critique quantitative research in the sociological literature.

## Calculator

Students are expected to have a calculator capable of taking the square root of a number (this does not need to be a fancy/expensive calculator). Students are further expected to be familiar with the operation of the calculator prior to the first exam. Graphing calculators and/or the calculators on students' cell phones/tablets are **not** acceptable.

## **Staying in Contact**

Course-related announcements will be sent out over email. It is the student's responsibility to ensure that the university has the correct email address on file and that the student's email account is in working order.

Outside of scheduled office hours/pre-scheduled appointments, the best means of contacting the instructor is through email. When sending an email, please put SOCI 315 at the beginning of the subject line. Please include a proper salutation, your full name, UCID number, and a proper closing in the body of your email. All emails violating customary email conventions will be ignored. I will make every effort to respond to emails conforming to the above conventions within 24 hours.

If you have a course-related question, please check the syllabus first. Questions that can be answered by consulting the syllabus will be ignored. Please do not use email as a replacement for an office visit. Given the nature of the material covered in the course, please use email only for administrative purposes (e.g., booking an appointment outside of office hours). Attempts to answer questions related to course material over email are error-prone, and so I will usually suggest that students come see me in person.

## **Required Readings**

The required text should be available at the U of C Used Bookstore or the U of C Bookstore:

Allison, Paul D. 1999. *Multiple Regression: A Primer*. Thousand Oaks: Pine Forge Press.

The required articles are available to download for free from any computer on campus:

### **Mediation:**

Preacher, Kristopher J. and Andrew F. Hayes. 2004. "SPSS and SAS Procedures for Estimating Indirect Effects in Simple Mediation Models." *Behavior Research Methods, Instruments & Computers* 36:717-731.

<http://link.springer.com/article/10.3758/BF03206553>

### **Logistic Regression:**

Prus, Steven. 2013. "Regression with a Dichotomous Dependent Variable: An Introduction to Logistic Regression to Accompany" *Statistics: A Tool for Social Research, Second Canadian Edition* by Joseph F. Healey and Steven G. Prus. Toronto, ON: Nelson Education.

[http://academic.cengage.com/resource\\_uploads/downloads/0176651365\\_348630.docx](http://academic.cengage.com/resource_uploads/downloads/0176651365_348630.docx)

**NOTE:** Although these are our primary readings, there may be a number of additional readings which will be announced at a later date.

## **Recommended Readings**

This recommended text is **NOT** available at the U of C Bookstore, but is available at online retailers:

Longest, Kyle C. 2015. *Using Stata for Quantitative Analysis*. 2nd ed. Thousand Oaks, CA: Sage Publications.

## **Required Software**

The statistical software used in this course will be Stata. Stata is available in the computer lab in the basement of the Social Sciences, but you can also lease Stata through their GradPlan. Stata/IC is the correct version, and you can lease it for six months for \$75. See:

<http://www.stata.com/order/new/edu/gradplans/>

## **Lecture Notes and Readings**

I will make the PowerPoint slides available on D2L. Students should print these slides and bring them to the lectures or have them available on an electronic device. These PowerPoint slides cover the basics, but students will still need to take notes during class. If a class is missed, it is the student's responsibility to get any additional notes from another student.

Details about the required readings (including specific page numbers) will be provided in class. Please note, the lecture and reading schedule presented in the syllabus is tentative, and will be slowed down or sped up as necessary.

## **Student Responsibilities**

1. A careful and punctual reading of the required material prior to class.
2. Regular attendance at lectures and labs.
3. Advanced notice to the instructor if unable to comply with the schedule of assignments due to illness.
4. Students who are having difficulty with the course are advised to contact the instructor immediately to discuss the situation.
5. Cell phones must be muted and students should refrain from using them during class.
6. Refrain from inappropriate or disruptive behavior, comments, or language. This will enable us to create a classroom environment in which all students feel. If there are any concerns about the classroom environment, students are encouraged to see me in person.

## **Grading**

Letter grades will be assigned and submitted to the registrar based on the following scale:

A+ = 95-100	B = 75-79	C- = 55-59
A = 90-94	B- = 70-74	D+ = 50-54
A- = 85-89	C+ = 65-69	D = 45-49
B+ = 80-84	C = 60-64	F = 44-0

Please note that a letter grade of "A" indicates superior performance, and excellent mastery of the material. A grade of "B" indicates above average performance, and good mastery of the material. A grade of "C" indicates satisfactory performance, and a basic understanding of the material. A grade of "D" indicates marginal performance, and minimal understanding of the material. Finally, a grade of "F" indicates unsatisfactory performance. I reserve the right to use the full scale of grades available. The grades for a course component may be scaled to maintain equity among sections and to conform to departmental norms.

## **Passing Grades**

A passing grade on each component is not necessary to pass the course on the whole. Passing the course requires the student's overall grade to be C- or higher.

## **Grade Reappraisal**

Within two weeks of the date the exam/assignment is returned, students seeking reappraisal of examinations or assignments must submit a written response to the instructor explaining the basis for reconsideration of the student's grade. The instructor will reconsider the grade assigned and will then book a time with the student to discuss his or decision and rationale. It should be noted that a re-assessed grade may be raised, lowered, or remain the same.

## **Assessment**

The final grade for this course will be based on four components:

1. Labs 30%

There will be a number of lab assignments throughout the term. These assignments serve as practice for the types of questions students will see on the exams. Second, they will help students learn and apply the statistical software Stata to analyze problems we cover in class. Lab assignments will be a mix of hand calculations, Stata exercises, and theoretical questions.

Labs should be handed in at the start of the next lab. Only hard copies of lab assignments will be accepted, I will not accept emailed assignments. All assignments must be typed and stapled, with the student's name clearly indicated on the front page. Late assignments will have grades deducted, 10% a day up to a maximum of 50%.

2. Mid-Term Exam 1 20%

The first exam will be administered on Thursday February 4<sup>th</sup>, 2016 during lab time and students will have 2 hours allotted for the exam. Students arriving late for an exam will have only the remaining time to take the exam. Students will be allowed one  $8\frac{1}{2} \times 11$  sheet (front and back) of notes during the exam, and the exams will require a calculator. All exams are partially cumulative, in that statistics courses are inherently cumulative. More information will be provided in class.

3. Mid-Term Exam 2 20%

The second exam will be administered on Thursday March 17<sup>th</sup>, 2016 during lab time and students will have 2 hours allotted for the exam. Students arriving late for an exam will have only the remaining time to take the exam. Students will be allowed one  $8\frac{1}{2} \times 11$  sheet (front and back) of notes during the exam, and the exams will require a calculator. All exams are partially cumulative, in that statistics courses are inherently cumulative. More information will be provided in class.

4. Final Exam 30%

The final exam will be administered during the registrar scheduled exams and students will have 2.5 hours allotted for the exam. Students arriving late for an exam will have only the remaining time to take the exam. Students will be allowed one  $8\frac{1}{2} \times 11$  sheet (front and back) of notes during the exam, and the exams will require a calculator. All exams are partially cumulative, in that statistics courses are inherently cumulative. More information will be provided in class. More information will be provided in class.

## **Course-Related Matters**

The main Sociology Department office does not deal with any course-related matters. Please speak directly to your instructor.

## Tentative Lecture, Reading, and Lab Schedule

<u>Date</u>	<u>Topic</u>	<u>Readings</u>	<u>Lab</u>
Jan 12	Introduction/Foundational Review		
Jan 14	Foundational Review Continued		Lab 0 (Not Graded)
Jan 19	Foundational Review Continued		
Jan 21	Bivariate Regression Review	Allison (1999)	Lab 1
Jan 26	Bivariate Regression Review Continued		
Jan 28	Bivariate Regression Review Continued		Lab 2
Feb 2	Bivariate Regression Review Continued		
Feb 4	<b>Exam 1 Review</b>		<b>Exam 1</b>
Feb 9	Multiple Regression		
Feb 11	Multiple Regression Continued		Lab 3
Feb 16	<b>Reading Week</b>		
Feb 18	<b>Reading Week</b>		
Feb 23	Multiple Regression Continued		
Feb 25	Multiple Regression Continued		
Mar 1	Nominal and Ordinal Variables as Predictors		
Mar 3	Nominal and Ordinal Variables as Predictors		Lab 4
Mar 8	Non-Linear Relationships		
Mar 10	Non-Linear Relationships		Lab 5
Mar 15	Non-Linear Relationships		
Mar 17	<b>Exam 2 Review</b>		<b>Exam 2</b>
Mar 22	Moderation		
Mar 24	Moderation		Lab 6
Mar 29	Mediation	Preacher & Hayes (2004)	
Mar 31	Mediation		Lab 7
Apr 5	Logistic Regression	Prus (2013)	
Apr 7	Logistic Regression		Lab 8
Apr 12	<b>Final Exam Review</b>		

## Course Policies

### *Handing in Assignments Outside of Class, Return of Student Work, and Release of Final Grades*

1. When students are unable to submit assignments in class, they should make arrangements to hand in their assignments directly to the instructor or teaching assistant. Assignments will not be accepted in the main Sociology Department office.
2. Student work 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 their work returned by mail provide the instructor with a stamped, self-addressed envelope. Otherwise, term work will be available for pick-up only during the instructor's office hours at the end of this term or at the beginning of the next term.
3. Final grades are not posted by the Sociology Department. They are available only online.

### ***Emergency Evacuations***

In the case of fire or other emergency evacuation of this classroom/lab, please proceed to the assembly point by the ICT - Food Court. 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 “Help” phone located around Campus.

### ***Deferrals***

If at all possible, you must provide advance notice to the instructor if you are unable to take a test or pass in an assignment or essay 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 physical or emotional problem rather than after recovery. Deferrals will be allowed in the following circumstances: illness, domestic affliction, or religious conviction. Travel arrangements and misreading of the syllabus 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:

[http://www.ucalgary.ca/registrar/files/registrar/Sp\\_Su\\_DFE\\_App.pdf](http://www.ucalgary.ca/registrar/files/registrar/Sp_Su_DFE_App.pdf)

### ***Deferred Term Work Form***

Deferral of term work past the end of a term also requires a form, available at:

[http://www.ucalgary.ca/registrar/files/registrar/deferred\\_termwork15.pdf](http://www.ucalgary.ca/registrar/files/registrar/deferred_termwork15.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).

### ***Academic Misconduct***

Plagiarism, cheating, and other academic misconduct are regarded as serious academic offences. Students are advised to consult the University Calendar which presents a Statement of Intellectual Honesty and definitions and penalties associated with cheating, plagiarism, and other 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>

### ***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 Departmental 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.

### ***Freedom of Information and Protection of Privacy (FOIP)***

The Freedom of Information and Protection of Privacy (FOIP) legislation disallows the practice of having students retrieve assignments from a public place, e.g., outside an instructor's office or the Department main office. Written assignments must be returned to students individually, during class, or during the instructor's office hours; if a student is unable to pick up her/his assignment s/he may provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

### ***Academic Accommodation***

Students who require academic accommodation, must register with Student Accessibility Services (formerly the Disability Resource Centre) at MC 452 (or phone 403-220-8237). 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. ***It is a student's responsibility to register with the Student Accessibility Services and to request academic accommodation, if required.***

Additional information on support services and accommodations for students with disabilities can be found at:

[www.ucalgary.ca/access/](http://www.ucalgary.ca/access/)

Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor.

The full policy on Student Accommodations is available at:

<http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>

### ***Student Representation***

The 2015-16 Students' Union VP Academic's email is: [suypaca@ucalgary.ca](mailto:suypaca@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 contact the Student Ombudsperson for help with a variety of University-related matters:

<http://www.ucalgary.ca/provost/students/ombuds/role>