

Introductory Social Statistics II			
Course Number	SOC 315		
Pre/Co-Requisites	SOC 311		
Instructor Name	Dr. Josh Curtis	Email	Joshua.curtis@ucalgary.ca
Instructor Email Policy	Feel free to contact me over email at any time. Please put your course number and section 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. I do not answer emails over the weekend. Please take that into account when emailing me questions pertaining to assignments or exams. If you have a course-related question, please check the course outline first. Please do not use e-mail as a replacement for a meeting, if there is something you want to discuss. Questions about the course content and readings, concerns about grades, or any other personal issues should be dealt with during my office hours.		
Office Location	SS 944	Office Hours	Th. 12:30-1:30 or by appt
Telephone No.	NA		
TA Name	Jie Miao	TA Email	Jie.miao@ucalgary.ca
TA Name	Erin Knox	TA Email	Erin.knox@ucalgary.ca
Class Dates	Tues. and Thurs.		
Class Times	Lectures Tues./Thurs. 9:30-10:45 Labs Thurs. 12:30-3:15		
Class Location	Lectures: SA 119 Labs: SA 015		

Course Description

This course covers the fundamentals of multiple regression, with a focus on the ordinary least squares (OLS) regression model. It also includes an introduction to more complex linear regression models, including models with limited dependent variables (e.g. logistic regression) and maximum likelihood estimation. Relevance for sociological research is discussed through examples drawn from the literature and the professor's own research. The course also includes a laboratory component where students will have opportunities to apply the techniques learned in class. The software Stata is used for the laboratory component of the course. This course is intended to provide students with the statistical skills to (1) successfully complete a quantitative Master's thesis, (2) understand and critique the wider sociological literature, (3) be prepared for more advanced courses (including SOC 711). At the end of this course, students should have knowledge and understanding of the way sociologists use multivariate methods to answer research questions about direct associations, moderation, and mediation, including ruling out spuriousness through observed controls. Students should also have mastery of the assumptions of the OLS

regression model, as well as how to test these assumptions. Moreover, students should be aware of how to address variables that are dichotomous, in the cases of when these variables are either predictors or outcomes.

Course Format

This course will be taught in person, synchronously.

Learning Resources – Required and Suggested texts

- Haan, Michael and Jenny Godly. 2017. *An Introduction to Statistics for Canadian Social Scientists*. Oxford University Press: Toronto.

The textbook below is **optional**, but I strongly suggest its purchase (available in the used bookstore or on-line via *vital source*):

- Mehmetoglu, Mehmet and Tor Georg Jakobsen. 2017. *Applied Statistics Using Stata: A Guide for the Social Sciences*. London: Sage Publications Ltd.

Methods of Assessment and Grading Weights

The course will have four requirements that will contribute to your final course grade:

2.1 Lab assignments (40%):

Lab assignments will be assigned **either on a weekly or bi-weekly basis**, depending on the weekly course module. In total, you should expect to complete approximately 6-8 lab assignments throughout the course. Due dates for labs will be determined once each lab is assigned during our Thursday lab time. Weekly lab demos—delivered by your Tas live during lab time Thursday's— will provide you with all theory and syntax needed to complete each of these assignments. Labs are delivered and organized by your teaching assistants. Since each lab will be graded out of a different total (depending on length and question detail) your total lab grade will be based on the additive score received on each lab assignment, divided by the total number of possible points across all labs (then multiplied by .40 to reflect a weight of 40%).

Your first lab will be an introduction to STATA and our course datasets (**the Canadian General Social Survey and the US MIDUS**) and will be delivered **on January 12th**. Your first lab assignment will be given to you in lab **on January 17th, due date TBD**.

2.2 Mid term #1 (25% of course grade):

This test will take place in class **on Thursday, February 16th, 2023**. It will consist of MCQ and short answer questions. You will have the entire class to complete the exam. A single-sided study aid, non-programable calculator and scrap paper are permitted.

2.3 Final Exam (35% of course grade):

This test will take place during the exam period. It will consist of MCQ and short answer questions. This exam is cumulative. A single-sided study aid, non-programable calculator and scrap paper are permitted.

Final Exam Information

Registrar scheduled. See above in section 2.3 for more information.

Course Schedule

*** This schedule is only *tentative* and is subject to change as the term progresses ***

Week 1: Introduction

January 10th: Course introduction

January 12th: The general Linear Model (GLM) *Review*

Lab #1: Stata and Data introduction lab | no lab assignment

Week 2: GLM Review *continued*

January 17th: The general Linear Model (GLM) *Review*

January 19th: The general Linear Model (GLM) *Review*

Lab #2: GLM review lab | lab 1 assignment

Week 3: Bivariate regression

January 24th: Bivariate regression I

January 26th: Bivariate regression I

Lab #3: Bivariate regression lab | lab 2 assignment

Week 4: Multivariate regression I

January 31st: Multivariate regression I

February 2nd: Multivariate regression I

Lab #4: Multivariate regression I&II lab | lab 3 assignment

Week 5: Multivariate regression II

February 7th: Multivariate regression II

February 9th: Multivariate regression II

Lab #5: Multivariate regression I&II | lab 3 assignment

Week 6: Catch up on prior lectures | Midterm #1 review | **Midterm #1**

February 14th: Catch up on prior lecture material (if needed) | Midterm #1 review

February 16th: Midterm #1 *in class*

Lab #6: lab review for all previous material | lab 4 assignment

Week 7: Reading break

February 21st: Reading week

February 23rd: Reading week

Week 8: Categorical Variables I

February 28th: Categorical Variables I

March 2nd: Categorical Variables I

Lab #7: Categorical variables I&II | lab 4 assignment

Week 9: Categorical Variables II

March 7th: Categorical Variables II

March 9th: Categorical Variables II

Lab #8: Categorical variables I&II | lab 4 assignment

Week 9: Indirect associations

March 14th: Indirect associations

March 16th: Indirect associations

Lab #9: Indirect associations | lab 5 assignment

Week 10: Non-linearity

March 21st: Non-linearity

March 23rd: Non-linearity

Lab #9: Non-linearity | lab 6 assignment

Week 11: Interactions

March 28th: Interactions

March 30th: Interactions

Lab #9: Interactions | lab 7 assignment

Week 12: Logistic Regression

April 4th: Logistic Regression

April 6th: Logistic Regression

Lab #10: Logistic regression | lab 8 assignment

Week 13: Logistic regression lecture and lab review

April 11th: Final lab due at 11:59 PM. In class review of Logistic regression and lab material

Grading Scale

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

Grade	Percent range	Grade Point Value	Description
A+	96 – 100%	4.0	Outstanding performance
A	90 – 95.99%	4.0	Excellent performance
A-	85 – 89.99%	3.7	Approaching excellent performance
B+	80 – 84.99%	3.3	Exceeding good performance
B	75 – 79.99%	3.0	Good performance
B-	70 – 74.99%	2.7	Approaching good performance
C+	67 – 69.99%	2.3	Exceeding satisfactory performance
C	63 – 66.99%	2.0	Satisfactory performance
C-	59 – 62.99%	1.7	Approaching satisfactory performance
D+	55 – 58.99%	1.3	Marginal pass. Insufficient preparation for subsequent courses in the same subject
D	50 – 54.99%	1.0	Minimal Pass. Insufficient preparation for subsequent courses in the same subject.
F	<50%	0	Failure. Did not meet course requirements.

IMPORTANT POLICIES AND INFORMATION

Absence From a Mid-term Examination

Students who are absent from a scheduled term test or quiz for legitimate reasons are responsible for contacting the instructor via email within 48 hours of the missed test to discuss alternative arrangements. A copy of that email may be requested as proof of the attempt to contact the instructor.

Deferred Term Work Form: Deferral of term work past the end of a term requires a form to be filled out by the student and submitted, along with any supporting documentation, to the instructor. The form is available at: https://live-ucalgary.ucalgary.ca/sites/default/files/teams/14/P22_deferral-of-term-work_lapseGrade.pdf

Once an extension date has been agreed between instructor and student, the instructor will email the form to the Faculty of Arts Program Information Centre (ascarts@ucalgary.ca) for approval by the Associate Dean.

Deferral of a Final Examination

Deferral of a final examination can be granted for reasons of illness, domestic affliction, and unforeseen circumstances, as well as to those with three (3) final exams scheduled within a 24-hour period. Deferred final exams will not be granted to those who sit the exam, who have made travel arrangements that conflict with their exam, or who have misread the examination timetable. The decision to allow a deferred

final exam rests not with the instructor but with Enrolment Services. Instructors should, however, be notified if you will be absent during the examination. The Application for Deferred Final Exam, deadlines, requirements and submission instructions can be found on the Enrolment Services website at <https://www.ucalgary.ca/registrar/exams/deferred-exams>.

Reappraisal of Grades:

For Reappraisal of Graded Term Work, see Calendar I.2

<http://www.ucalgary.ca/pubs/calendar/current/i-2.html>

For Reappraisal of Final Grade, see Calendar I.3

<http://www.ucalgary.ca/pubs/calendar/current/i-3.html>

Academic Misconduct:

Academic Misconduct refers to student behavior that compromises proper assessment of students' academic activities and includes: cheating; fabrication; falsification; plagiarism; unauthorized assistance; failure to comply with an instructor's expectations regarding conduct required of students completing academic assessments in their courses; and failure to comply with exam regulations applied by the Registrar.

For information on the Student Academic Misconduct Policy, Procedure and Academic Integrity, please visit: <https://www.ucalgary.ca/pubs/calendar/current/k-3.html>

Plagiarism And Other Forms Of Academic Misconduct

Academic misconduct in any form (e.g. cheating, plagiarism) is a serious academic offence that can lead to disciplinary probation, suspension or expulsion from the University. Students are expected to be familiar with the standards surrounding academic honesty; these can be found in the University of Calgary calendar at <http://www.ucalgary.ca/pubs/calendar/current/k.html>. Such offences will be taken seriously and reported immediately, as required by Faculty of Arts policy.

Recording of Lectures:

Recording of lectures is prohibited, except for audio recordings authorized as an accommodation by SAS or an audio recording for individual private study and only with the written permission of the instructor. Any unauthorized electronic or mechanical recording of lectures, their transcription, copying, or distribution, constitutes academic misconduct. See <https://www.ucalgary.ca/pubs/calendar/current/e-6.html>.

Academic Accommodations:

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services. SAS will process the request and issue letters of accommodation to instructors. 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

<https://www.ucalgary.ca/legal-services/university-policies-procedures/student-accommodation-policy>

Research Ethics

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 Conjoint Faculties Research Ethics Board. In completing course requirements, students must not undertake any

human subject research without discussing their plans with the instructor, to determine if ethics approval is required.

Instructor Intellectual Property

Course materials created by instructors (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the instructor. These materials may NOT be reproduced, redistributed or copied without the explicit consent of the instructor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

Freedom of Information and Protection of Privacy (FOIP) Act:

Personal information is collected in accordance with FOIP. Assignments can only be returned to the student and will be accessible only to authorized faculty and staff. For more information, see <https://www.ucalgary.ca/legal-services/access-information-privacy>

Copyright Legislation:

See the University of Calgary policy on Acceptable Use of Material Protected by Copyright at <https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy> Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

Course materials created by instructors (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the instructor. These materials may NOT be reproduced, redistributed or copied without the explicit consent of the instructor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

Evacuation Assembly Points

In the event of an emergency evacuation from class, students are required to gather in designated assembly points. Please check the list found at <https://www.ucalgary.ca/risk/emergency-management/evac-drills-assembly-points/assembly-points> and note the assembly point nearest to your classroom.

Important Dates:

Please check: <http://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html>.

Faculty of Arts Program Advising and Student Information Resources

- Have a question, but not sure where to start? The Arts Students' Centre is your information resource for everything in Arts! Drop in at SS102, call them at 403-220-3580, or email them at artsads@ucalgary.ca. You can also visit the Faculty of Arts website at <http://arts.ucalgary.ca/undergraduate>, which has detailed information on common academic concerns, including program planning and advice.
- For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at 403-210-ROCK [7625] or visit them in the MacKimmie Tower.

Important Contact Information

Campus Security and Safewalk (24 hours a day/7 days a week/365 days a year)
Phone: 403-220-5333

Faculty of Arts Undergraduate Students' Union Representatives
Phone: 403-220-6551
Email: arts1@su.ucalgary.ca, arts2@su.ucalgary.ca, arts3@su.ucalgary.ca,
arts4@su.ucalgary.ca
Students' Union URL: www.su.ucalgary.ca

Graduate Students' Association
Phone: 403-220-5997
Email: askgsa@ucalgary.ca
URL: www.ucalgary.ca/gsa

Student Ombudsman
Phone: 403-220-6420
Email: ombuds@ucalgary.ca

Campus Mental Health Resources

The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the excellent mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the following resources:

SU Wellness Centre: <http://www.ucalgary.ca/wellnesscentre/>

Student Wellness Services:
<https://www.ucalgary.ca/wellness-services/services/mental-health-services>

Campus Mental Health Strategy website: <https://www.ucalgary.ca/mentalhealth/>.