Fall 2020
FACULTY OF ARTS
Department of Sociology
Department of Sociology Website: https://soci.ucalgary.ca/

COURSE TITLE: Social Statistics: The General Linear Model			
Course Number	SOCI 611		
Pre/Co-Requisites	SOCI 311 or equivalent		
Instructor Name	Naomi Lightman	**Email**	Naomi.lightman@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. All emails violating customary email conventions will be ignored. All other emails will be answered within one business day. I do not answer emails over the weekend. Please take that into account when emailing me questions pertaining assignments or exams. 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. 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.		
Office Location	Zoom	**Office Hours**	By Appointment
Telephone No.	NA		
TA Name	Hamid Akbary	**TA Email**	akbary.sayed@ucalgary.ca
TA Office Location	Zoom	**TA Lab Assistance & Office Hours**	9am-11:45am on Fridays or by appointment.
Class Dates	Wednesdays		
Class Times	9am-11:45am		

Class Location	Online

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 an applied component where students will have opportunities to apply the techniques learned in class, which will use the software Stata. 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 SOCI 711).

Course Objectives/Learning Outcomes

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. Students will also learn what data is available through the Statistics Canada Research Data Centres and the ICPSR repository.

Course Format

This course will involve a three-hour, synchronous lecture via Zoom every week on Wednesdays. All course materials (e.g. powerpoints and assignment details) will be posted to D2L.

Learning Resources

The required textbook for this course is:

Applied Statistics Using Stata: A Guide for the Social Sciences (2016) by Mehmet Mehmetoglu and Roe Georg Jakobsen.

In addition, each student will require access to STATA/IC on a personal computer to complete the labs:

A 6-month student license is available for $48USD here:
https://www.stata.com/order/new/edu/gradplans/student-pricing/

NOTE: There will also be several additional readings assigned. Usually, these papers will be available for downloading through the university library or I will post them on D2L.

Learning Technologies and Requirements

There is a D2L site for this course which contains labs, assignments and other relevant class resources and materials (see d2L.ucalgary.ca).
In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:
- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Broadband internet connection.

Most current laptops will have a built-in webcam, speaker and microphone.

Schedule of Lectures and Readings

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 – Sept. 9 - Course Overview and Review of Introductory Statistics

Notes:
- Prior to this lecture, students are expected to have read the course syllabus; course policies, assignments and expectations will be reviewed only briefly, on a Q&A basis.
- The TA will be holding an optional online lab this week providing an introduction and overview to using STATA. This will be held on Zoom on Friday Sept. 11 from 9am - 11:45am.
- Lab #1 is due by Sept. 13 at 11:59pm on D2L.

Optional Readings: Mehmetoglu and Jakobsen, Chapters 1 & 2.

Week 2 –Sept. 16 – Bivariate Regression and Correlation

Note:
- Lab #2 is due by Sept. 20 at 11:59pm on D2L.

Reading: Mehmetoglu and Jakobsen, Chapter 3

Optional Reading: Andrea Noack, "Social Statistics in Action". Chapter 11, Introduction to Linear Regression. (Posted to D2L).

***Week 3 –Sept. 23 –* Introduction to Multiple Regression**

Note:
- Lab #3 is due by Sept. 27 at 11:59pm on D2L.

 Reading: Mehmetoglu and Jakobsen, Chapter 4.

***Week 4 –Sept. 30 – Tests of Significance* (Guest Lecture by Claire Link)**

Note:
- Lab #4 is due by Oct. 4 at 11:59pm on D2L.

No Required Reading.

Week 5 –Oct. 7 – The Assumptions of Multiple Regression

Note:
- Lab #5 is due by Oct. 11 at 11:59pm on D2L.

Reading: Mehmetoglu and Jakobsen, Chapter 7.

Optional Reading: Paul D. Allison. "Multiple Regression: A Primer." Chapter 6, What are the assumptions of Multiple Regression?. (Available to access for free online via the Taylor Digital Library)

***Week 6 –Oct. 14 -* Using CANSIM, RDC Data, and the PUMF datafiles from Statistics Canada**

Reading: Naomi Lightman and Luann Good Gingrich (2018). "Measuring economic exclusion for racialized minorities, immigrants and women in Canada: results from 2000 and 2010." *Journal of Poverty* (Posted to D2L).

Week 7 – Oct. 28 – Dummy Variables and Downloading Data from ICPSR

Note:
- Lab #6 is due by Nov. 1 at 11:59pm on D2L.

Reading: Mehmetoglu and Jakobsen, Chapter 5.

Week 8 –Oct. 21 – Non-Linear Relationships

Note:
- RDC Application Assignment is due by Oct 27 at 11:59pm on D2L

No Required Reading.

Week 9 –Nov. 4 – Logistic Regression **(Guest Lecture by Professor Marisa Young)**

Note:
- Lab #7 is due by Nov. 8 at 11:59pm on D2L.

Reading: Mehmetoglu and Jakobsen, Chapter 8.

*NOTE: No class Nov. 11 due to Term Break.

Week 10 –Nov. 25 – Interactions and Mediation

Note:
- Lab #9 is due by Nov. 22 at 11:59pm on D2L.

Reading: Mehmetoglu and Jakobsen, Chapter 6.

Week 11 –Nov. 18 - **Nonadditive Relationships (Moderation)**

Note:
- Lab #8 is due by Nov. 15 at 11:59pm on D2L.

No Required Reading.

Week 12 – Dec. 2 – Presentations and Feedback on Final Assignments.

Note:
- Lab #10 is due by Nov. 29 at 11:59pm on D2L.
- All students will be required to give a brief (5-10 min) presentation on their ICPSR assignment and provide feedback to fellow students.

No Required Reading

Week 13 – Dec. 9 – Conclusions, Wrapping Up, Future Possibilities

Note:
- ICPSR Assignment is due by Dec. 13 at 11:59pm on D2L.

Reading: Naomi Lightman and Anthony Kevins (2019). "Bonus or Burden? Care Work, Inequality, and Job Satisfaction in Eighteen European Countries." *European Sociological Review* (Posted to D2L).

Methods of Assessment and Grading Weights

Type	Description	Date Due	Weight
Take-home assignment	Labs (10 assignments, each worth 6%)	See Schedule of Lectures and Readings	60%
Take-home assignment	Mock RDC Application	October 27, 2020	15%
Take-home assignment	ICPSR Regression Analysis	December 13, 2020	20%
Presentation	5-10 Minute Presentation on ICPSR Assignment	December 2, 2020	5%
Total			100%

Graded Components

1. Labs

Labs are your opportunity to learn to apply the concepts discussed in class to real-world data. For lab exercises, the class will work from a large probability sample of residents from the U.S., the MIDUS Refresher (2011-2014). Students will have a minimum of 1 week to complete each lab. Students may work in pairs to complete the lab if they wish to do so but note that ONE GRADE will be applied for each submitted lab (meaning students in pairs will receive the same grade in all circumstances). Note that you may not be able to complete assignments during the time allotted for the Friday lab, which may require you to devote additional time to the assignments outside of lab. Late labs will have 5% deducted for each day and will no longer be eligible to submit 1 week after they are due.

2. Mock RDC Application

Students will be required to submit a mock RDC application using a Statistics Canada dataset of their choosing. Note that this is an individual assignment only. Details of the assignment will be discussed in lecture and posted on D2L. The assignment is due on October 27th. It is to be submitted on D2L by 11:59pm.

3. ICPSR Regression Analysis

Students will be required to complete a regression analysis assignment (writing up your methods, presenting your results, and analysing your findings) using one of two selected ICPSR datasets. Note that this is an individual assignment only. Details of the assignment will be discussed in lecture and posted on D2L. The assignment is due on December 13th. It is to be submitted on D2L by 11:59pm.

4. Presentation

You will be required do 5-10 minute presentation during lecture on December 2nd where you will discuss your in-process ICPSR Regression Analysis. You may use powerpoints slides to present your findings to-date. This will be a valuable chance to receive feedback from your instructor and fellow students before the assignment is submitted. For students who are unable to attend lecture synchronously please contact the professor early in the semester to discuss an accommodation.

Final Exam Information
There is no final exam in this course.
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 - superior performance showing comprehensive understanding of the subject matter
A-	85 – 89.99%	3.7	Very good performance
B+	80 – 84.99%	3.3	Good performance
B	75 – 79.99%	3.0	Satisfactory performance
B-	70 – 74.99%	2.7	Minimum pass for students in the Faculty of Graduate Studies
C+	67 – 69.99%	2.3	All grades of "C+" or lower are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements.

Absences and Deferrals

Students who miss class assessments (presentations, participation activities, or other assignments) should inform their instructor as soon as possible. If the reason provided for the absence is acceptable, the instructor may decide that any arrangements made can take forms other than make-up tests or assignments. For example, the weight of a missed grade may be added to another assignment or test.

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/deferral-of-term-work-2020.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.

Grade Reappraisal

Within two weeks of the date the lab/assignment is returned, students seeking reappraisal of examinations 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.

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 can provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary

3. Final grades are not posted by the Sociology Department. They are only available online.

Guidelines for Zoom Sessions

Zoom is a video conferencing program that will allow us to meet at specific times for a "live" video conference, so that we can have the opportunity to meet each other virtually and discuss relevant course topics as a learning community. The Zoom sessions will not be recorded.

To help ensure Zoom sessions are private, do not share the Zoom link or password with others, or on any social media platforms. Zoom links and passwords are only intended for students registered in the course. Zoom recordings and materials presented in Zoom, including any

teaching materials, must not be shared, distributed or published without the instructor's permission.

The use of video conferencing programs relies on participants to act ethically, honestly and with integrity; and in accordance with the principles of fairness, good faith, and respect (as per the Code of Conduct). When entering Zoom or other video conferencing sessions (such as MS Teams), you play a role in helping create an effective, safe and respectful learning environment. Please be mindful of how your behaviour in these sessions may affect others. Participants are required to use names officially associated with their UCID (legal or preferred names listed in the Student Centre) when engaging in these activities. Instructors/moderators can remove those whose names do not appear on class rosters. Non-compliance may be investigated under relevant University of Calgary conduct policies (e.g Student Non-Academic Misconduct Policy). If participants have difficulties complying with this requirement, they should email the instructor of the class explaining why, so the instructor may consider whether to grant an exception, and on what terms. For more information on how to get the most out of your zoom sessions visit: https://elearn.ucalgary.ca/guidelines-for-zoom/ .

If you are unable to attend a Zoom session, please contact your instructor to arrange an alternative activity for the missed session. Please be prepared, as best as you are able, to join class in a quiet space that will allow you to be fully present and engaged in Zoom sessions. Students will be advised by their instructor when they are expected to turn on their webcam (for group work, presentations, etc.).

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 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.

Copyright Legislation

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (https://www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright-policy.pdf) and requirements of the Copyright Act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorized sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

Instructor Intellectual Property

Course materials created by professor(s) (including course outlines, presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). These materials may NOT be reproduced, redistributed or copied without the explicit consent of the professor. 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.

Recording of Lectures

Note that the audio or video recording of lectures and taking screengrabs of PowerPoint slides during the lecture are not permitted without explicit authorization. The non-authorized media recording of lectures is inconsistent with the Code of Conduct and may result in discipline in accordance with the Student Non-Academic Misconduct Policy and Procedure. For more information click here: https://www.ucalgary.ca/policies/files/policies/non-academic-misconduct-policy.pdf.

Sharing of Lecture Notes and Exam Questions

Note that publicly sharing lectures notes and exam questions on 3rd party sites such as OneClass, StudyBlue, Quizlet, Course Hero, etc. is not permitted. If you wish to use these helpful studying tools, make sure you adjust your privacy settings accordingly. Any violations are subject to investigation under the UofC Student Non-Academic Misconduct Policy. For more information, click here:https://www.ucalgary.ca/policies/files/policies/non-academic-misconduct-policy.pdf.

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.html

Academic Accommodation

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. For additional information on support services and accommodations for students with disabilities, visit 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

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

Libraries & Cultural Resources

To contact your librarian or find out about the resources and services available to sociology students go to the Sociology Library guide: https://library.ucalgary.ca/guides/sociology

To access the main Library website go to: https://library.ucalgary.ca

Wellness and Mental Health Resources

The University of Calgary recognizes the pivotal role that 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 support 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 Student Wellness Services (Room 370 MacEwan Student Centre, https://www.ucalgary.ca/wellness-services/services/mental-health-services) and the Campus Mental Health Strategy (http://www.ucalgary.ca/mentalhealth/).

Student Success Centre

The Student Success Centre provides services and programs to ensure students can make the most of their time at the University of Calgary. Our advisors, learning support staff, and writing support staff assist students in enhancing their skills and achieving their academic goals. They provide tailored learning support and advising programs, as well as one-on-one services, free of charge to all undergraduate and graduate students. For more information visit: https://www.ucalgary.ca/student-services/student-success

Student Ombuds Office

The Student Ombuds Office supports and provides a safe, neutral space for students. For more information, please visit www.ucalgary.ca/ombuds/ or email ombuds@ucalgary.ca.

Student Representation

The Graduate Student Association VP Academic can be contacted at **vpa.gsa@ucalgary.ca**

For more information, and to contact other elected officials with the GSA, please visit this link: https://www.ucalgary.ca/pubs/calendar/grad/current/graduate-students-association-gsa-grad.html

Emergency Evacuation/Assembly Points

Assembly points for emergencies have been identified across campus. Assembly points are designed to establish a location for information updates from the emergency responders to the evacuees; from the evacuated population to the emergency responders. For more information, see the University of Calgary's Emergency Management website:

https://live-risk.ucalgary.ca/risk/emergency-management/evac-drills-assembly-points/assembly-points

Safewalk

Campus security will escort individuals, day or night, anywhere on campus (including McMahon Stadium, Health Sciences Centre, Student Family Housing, the Alberta Children's Hospital and the University LRT station). Call 403-220-5333 or visit http://www.ucalgary.ca/security/safewalk. Use any campus phone, emergency phone or the yellow phone located at most parking lot pay booths. Please ensure your personal safety by taking advantage of this service.