

SOCI 611: The General Linear Model

The University of Calgary, Faculty of Arts, Department of Sociology
Course Outline, Fall Semester, 2016

<p>Instructor Alex Bierman, Ph.D. Office: SS 902 Phone: 403-220-6226 E-mail: aebierma@ucalgary.ca Office Hours: Tuesdays & Thursdays 11:00 am – noon or by appointment. Please note that I will often be available Thursday afternoons as well.</p> <p>Teaching Assistant: TBA</p>	<p>Lecture Schedule: 9:00 am - 11:50 am, Wednesdays, SS 921.</p> <p>Final: Registrar Scheduled.</p>
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Required Text

Hoffmann, John P. and Kevin Shafer. 2015. *Linear Regression Analysis: Assumptions and Applications*. National Association of Social Workers/N A S W Press.

Please note that this text can be purchased directly from the publisher at:

<https://www.naswpress.org/publications/clinical/linear-regression-analysis.html>.

This appears to be the cheapest way to obtain this text.

NOTE: There will also be several additional readings assigned. Usually, these papers will be available for downloading through the university library or through texts that are available in the graduate library.

Course Description and Objectives

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 SOCI 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.

Prerequisites

SOCI311 or equivalent

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 due to the complexity of the course material, we prefer that you contact us by email for administrative purposes only. For instance, you may email us to schedule an appointment outside of office hours. When e-mailing, please put "SOVI 611" 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. Make sure to email all of TA and the course instructor when emailing a question—this will help to increase the response times to your emails.

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

Please note that a grade of A indicates excellent performance, and therefore indicates a comprehensive and thorough grasp of the material. A grade of B indicates a strong grasp of the material. I reserve the right to use the full scale of grades available.

Grade Distribution

Lab	30%
Exam 1	35%
Exam 2	35%

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.

Labs and Exams

Lab is 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. Because of the importance of labs for understanding how to apply statistics for real-world problems, the TA will be directed to grade the labs quite strenuously.

All lab assignments will be due on the Wednesday morning following lab. Labs should be turned in through the appropriate folder on D2L by 9:00 AM. Policies for allowing late/deferred labs are the same as those for allowing deferred exams. 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.

Exams will be conducted in a classroom, rather than the lab. Although you may be asked questions that involve Stata output or syntax, you will not need to use statistical software for the exams. However, exams may cover material addressed on labs. All exams will be open note and open text. Please note that this will allow Dr. Bierman to ask fairly in-depth questions. In other words, you won't be able to simply start going through your notes and text at the time of the exam and do well in this class. Please note that the schedule in this course outline is tentative, including the date and time of the exams. Exam 1 is *tentatively* set to be administered during the week of October 24th. It is your responsibility to be aware of when an exam will be given. Exams will last a class period, and students should expect to need the entire period to complete the exam.

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 Social Science - 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 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://www.ucalgary.ca/policies/files/policies/student-accommodation-policy_0.pdf. 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.