



SOC 315 NAME INTRODUCTORY SOCIAL STATISTICS II			
Pre/Co-Requisites	SOC 311		
Instructor:	Dr. Hamid Akbary	Lecture Location:	SA 147
Phone:		Lecture Days/Time:	TR 09:00 - 11:45am
Email:	<a href="mailto:akbary.sayed@ucalgary.ca">akbary.sayed@ucalgary.ca</a>		
Office:	SS911	Office Hours:	Thursdays 4:00 – 5:00pm
<b>Instructor Email Policy</b>	<p><i>Class announcements will 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. <b>Due to the complexity of course material, some questions about course content may not be answered over email. Instead, you must meet with the course instructor, or the Teaching Assistant (TA) if you have questions about the course material.</b> We will make every effort to reply to your e-mails within 24 hours (not counting weekends), but it may take up to 48 hours to respond.</i></p> <p><b>A brief note on email etiquette.</b> When emailing the instructor or the TA, your email <b>MUST</b> always contain the following elements:</p> <ul style="list-style-type: none"> <li>• "SOC 315" should be in the subject line of the email. Emails that do not include "SOC 315" in the subject line may not be read or acknowledged.</li> <li>• You should put the issue you are emailing about in the body of your email, using correct sentence structure, spelling, and punctuation.</li> <li>• You should sign your name and include your student number.</li> </ul>		

### Course Description

This course will focus on multivariate statistics. It will include topics such as multiple regression, dichotomous predictors, non-linear relationships, tests of mediation, and interaction analysis. Please note that this course will expand on the material learned in SOC 311. We will begin with a review of concepts from SOC 311 before introducing new topics, but familiarity with material from SOC 311 is expected.

### Course Objectives/Learning Outcomes

At the end of this course, students should have knowledge and understanding of the application of the basic OLS regression model to the study of sociologically based research questions. Students should be familiar with the concept of statistical control and why statistical controls are commonly used in the social sciences, as well as be able to employ statistical control in an OLS context using the Stata statistical program. Students should be able to explain the conditions under which a dichotomous variable or set of dichotomous variables can be used in an OLS regression model, and also employ a dichotomous predictor or set of dichotomous predictors in a multivariate regression model using Stata. Students should also have an appreciation of the way that mediation can be used to explain associations, as well as how interactions are used to test moderation. Additionally, students will learn

how to conduct a quantitative research project, using secondary data. This will involve writing a research proposal, conducting data analysis, and writing a research report.

**Required Textbooks, Readings, Materials, Electronic Resources**

The class has one *optional* textbook, which can be purchased through the university bookstore. The textbook will not be posted to D2L. The book is:

Mehmetoglu, Mehmet and Tor Georg Jakobsen. 2017. *Applied Statistics Using Stata: A Guide for the Social Sciences*. Sage Press. (ISBN: 9781473913233)

**LEARNING TECHNOLOGIES AND REQUIREMENTS**

There is a D2L site for this course which will contain all PowerPoint slides, as well as the data you will use in labs and sample Stata syntax (see d2L.ucalgary.ca). PowerPoint slides will be posted on D2L as the class progresses. There are no lecture notes besides the PowerPoint slides. Students will be notified by email when a set of slides are posted on D2L.

**Schedule of Lectures and Readings**

WEEK/DATE	LECTURE
Week 1: June 27 & June 29	Lecture 1. Bivariate Regression
Week 2: July 4 & July 6	Lecture 2. Hypothesis Testing in Bivariate Regression
Week 3: July 11 & July 13	Lecture 3. Introduction to Multiple Regression
Week 4: July 18 & July 20	Lecture 4. Hypothesis Testing in Multiple Regression
Week 5: July 25 & July 27	Lecture 5. Categorical Predictors in Multiple Regression
Week 6: Aug 1 & Aug 3	Lecture 6. Testing Group Differences in Slopes: Moderation
Week 7: Aug 8	Lecture 7. Testing Indirect Associations: Mediation

**Methods of Assessment and Grading Weights**

COMPONENT	WEIGHTING	DUE DATES/DAY	STRUCTURE
Lab assignment	40%	Lab 1 due on Friday, July 7 at 6:00pm Lab 2 due on Friday, July 21 at 6:00pm Lab 3 due on Friday, July 28 at 6:00pm Lab 4 due on Friday, Aug 4 at 6:00pm Lab 5 due on Friday, Aug 11 at 6:00pm	Independent/Individual-based activity Independent/Individual-based activity Independent/Individual-based activity Independent/Individual-based activity Independent/Individual-based activity
Quiz	20%	Quiz 1 due on Monday, July 10 at 6:00pm Quiz 2 due on Monday, July 24 at 6:00pm Quiz 3 due on Monday, July 31 at 6:00pm Quiz 4 due on Tuesday, Aug 8 at 9:00am Quiz 5 due on Monday, Aug 14 at 6:00pm	Independent/Individual-based activity Independent/Individual-based activity Independent/Individual-based activity Independent/Individual-based activity Independent/Individual-based activity
Research proposal	15%	Research proposals due on Friday July 21 at 6:00pm	Collaborative/Group-based activity
Research report	25%	Research reports due on Monday, Aug 14 at 6:00pm	Collaborative/Group-based activity
Total	100%		

### **Lab Assignments (40%)**

Labs will serve two purposes. First, labs will be a student's opportunity to answer questions regarding the material that will be addressed on the quizzes, but with a T.A. or instructor available for assistance. Second, students will learn and apply the Stata computer program to analyze data using statistical procedures that are being covered in class. Lab assignments will be a mix of work problems and Stata exercises. Labs should be turned in through the appropriate folder on D2L.

Labs will be held in person at specific days and times of labs reserved, which will be Tuesdays and Thursdays from 1:00 to 3:45pm.

Labs will be due at 6:00pm every Friday with the exception of the first and third weeks of the course.

Absolutely no handwriting or pictures of handwriting should be turned in as a lab answer; hand-written drawings of figures or pictures of hand-written drawings are also not acceptable. Answers of this type will not receive lab credit.

There are five labs in this course. Each lab will be worth 8%, all of which together will be worth 40% of a student's final grade.

### **Quizzes (20%)**

The class will have weekly quizzes that will be posted to D2L every Thursday by 6:00pm with the only exception of the first week. Each quiz will be composed of 10-20 true/false and multiple-choice questions. It is estimated that each quiz will take no more than 1 hour to complete. The D2L system will, however, be set up to allow 3 hours to complete each quiz. Students can take the quiz at any time between when the quiz is posted to D2L and when the quiz is closed on Monday of the following week at 6:00pm, except for Quiz 4 as Monday, Aug 7 is a holiday.

Please be aware that, when taking a quiz, only one question will be displayed on a page. It is the students' responsibility to ensure that they have selected an answer they intended before moving on to the next question. It is also the student's responsibility to ensure that they finish the quiz in the allotted time. Once a student has submitted the quiz, the student **cannot** go back and change answers or re-take the quiz.

Quizzes will focus on material recently covered in class. However, because knowledge in statistics is cumulative, all quizzes may address any material covered up to that point in class. Students will **not** need to use Stata for the quizzes but may be asked to interpret Stata outputs on the quizzes.

All quizzes are take-home and open-book. Students may use the textbook as well as all lecture and lab materials in answering the questions. Students may **not** use any other resource to complete the quizzes. Prohibited resources include (but are not limited to): friends, family, and other students in the class; tutors, your instructor and TA; and google, web pages, twitter, and other electronic resources. If a

student is unclear on whether a resource is prohibited, the student should contact the instructor **before** using the resource.

If a student experiences connectivity or other electronic issues while taking a quiz, that prevent completing the quiz in the 3-hour time-period, the student should contact the instructor immediately. The student should not wait until the grades are posted.

There are five quizzes in this course. Each quiz will be worth 4%, all of which together will be worth 20% of a student's final grade.

### **Research Proposal (15%)**

The purpose of the research proposal is to assess your ability to incorporate the statistical concepts and methods you learn in this course into a quantitative research proposal. The students will work in groups of two to three individuals to provide short answers to a set of questions. The proposal must be up to 5 pages and will be worth 15% of a student's final grade.

All group members are expected to participate and have equal contribution to the writing and development of the ideas for the research proposal.

The topic of research proposals is entirely up to the students/groups. However, they may consult with the instructor and/or the course TA.

Students will be provided with a detailed rubric for this activity at the beginning of the course. Research proposals will be due on Friday July 21 at 6:00pm.

### **Research Report (25%)**

The purpose of research report is to assess your ability to analyze data and report the findings in the form a formal report. The students will be provided with *secondary* data to complete their research reports based on the proposals they develop earlier in the course. The students will work in the same groups of two to three individuals to complete the research reports. The reports must be up to 10 pages, including the research proposal, and will be worth 25% of a student's final grade.

Similar to the research proposals activity, group members are expected to participate and have equal contribution to the analysis and writing of their research reports

Students will be provided with a detailed rubric for this activity during the course.

Research reports will be due on Monday, Aug 14 at 6:00pm.

### **Final Examination**

Final Exam	No
Format	N/A
Modality	N/A
Type	N/A
Duration	N/A
Aids	N/A

## **Grading Scale**

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

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

The final course grade is calculated based on student's grades on weekly lab assignments, quizzes, research proposal, and research report.

### **Missed or Late Coursework**

If a student does not turn in the lab by this date and time, the D2L folder will close and the student will need to email the assignment directly to the course instructor. If the lab is turned in after the due date and does not meet the policy for deferrals, 50% of the total marks possible will be deducted from the lab before any marks are deducted for errors.

If a student turns in an assignment partially completed, no additional aspects of the assignment will be accepted after the due date. Furthermore, if a student accidentally turns in the wrong assignment and does not realize this until after the due date, the student will not be allowed to turn in the correct assignment for credit after the due date. A student is free to turn in an updated assignment before the due date; D2L will be set so that only the most recently turned-in assignment is retained for grading. It is the student's responsibility to check and make sure that the labs they have submitted is complete and before the deadline.

### **Technology Use**

There is a D2L site for this course which will contain all PowerPoint slides, as well as the data you will use in labs and sample Stata syntax (see [d2L.ucalgary.ca](http://d2L.ucalgary.ca)).

## **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>

## **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](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](mailto: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](mailto: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](mailto:arts1@su.ucalgary.ca), [arts2@su.ucalgary.ca](mailto:arts2@su.ucalgary.ca), [arts3@su.ucalgary.ca](mailto:arts3@su.ucalgary.ca),  
[arts4@su.ucalgary.ca](mailto:arts4@su.ucalgary.ca)  
Students' Union URL: [www.su.ucalgary.ca](http://www.su.ucalgary.ca)

Graduate Students' Association  
Phone: 403-220-5997  
Email: [askgsa@ucalgary.ca](mailto:askgsa@ucalgary.ca)  
URL: [www.ucalgary.ca/gsa](http://www.ucalgary.ca/gsa)

Student Ombudsman  
Phone: 403-220-6420  
Email: [ombuds@ucalgary.ca](mailto: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/>.