

SOCI 507/SOCI 471 ¹

Intermediate Social Statistics

Instructor: Ruth Kampen (rkampen@uvic.ca)

Prerequisites:

This course is intended to build upon the statistical knowledge students have acquired in Sociology 271. That is, I assume that students have had Sociology 271 or equivalent. For students who completed their undergraduate training elsewhere, this implies one semester course in statistics, covering basic descriptive and inferential statistics, ideally including bivariate regression analysis.

Course Description:

The purpose of this course is to introduce useful statistical methods (especially multivariate regression models) for social scientists, including various extensions of linear models, logistic models, and count models. In each class, we will both study the statistical model and its empirical application in substantive fields. For sociology students, the most helpful way to study a statistical model is to look at how it can be employed to address sociological questions in practice. The course provides an overview of useful techniques, rather than going into great technical details. We will discuss some pertinent statistical theories in class sessions, but the emphasis will be on applications.

You will learn to conduct data analysis with the aid of a software package Stata. The computing facilities on campus have Stata on their computers. If you would like to work with Stata on your own computer, you may want to purchase a student copy of the software:

<https://www.stata.com/order/new/edu/gradplans/student-pricing/>.

As an important part of this course, the lab will provide instruction on how to use Stata. Attendance at labs is mandatory. The labs reinforce the material introduced during lecture and provide an opportunity to practice running models and interpreting the output.

Students will be evaluated through lab homework assignments, an in-class exam and a quantitative research paper which will require synthesizing the course and lab material using the analysis tools learned.

Course Outcomes/Objectives:

At the end of this course, you should have sufficient familiarity with regression techniques to (1) feel more confident reading literature that uses advanced regression techniques, and (2) apply these procedures properly in your own research. This course will also lay the foundation for more advanced studies in statistical models. It is hoped that some of you will use the methods learned in this course in your own thesis/dissertation research.

Recommended (not Required) Textbook:

Alan C. Acock. 2016. *A Gentle Introduction to Stata*. Stata Press. (4th, 5th or 6th Edition)

¹ This online outline is only intended to give an overall sense of the course. Detailed course outlines will be made available for all registered students on the first day of class. Only those outlines are to be considered official.