

LAKEHEAD UNIVERSITY
DEPARTMENT OF SOCIOLOGY

Sociology 3311 FA
Research Techniques & Data Analysis
Dr. Jianye Liu

Office: RB 2037

Telephone: 343-8215

Email: jianye.liu@lakeheadu.ca or jliu8@lakeheadu.ca

Office Hours: Monday & Wednesday: 9:00 AM-4:00 PM via email

Classes: Monday & Wednesday, 10:00AM-11:30AM, Zoom

Texts:

Healey, J.F. & Steven G. Prus. 2019. *Statistics: A Tool for Social Research, 4th Canadian Edition*. Toronto, ON: Nelson Education Ltd.

Course Description:

Sociology 3311 FA is the second part of the previous sociology 3309 YA (a full year course) designed to provide students with a preliminary understanding of the skills and knowledge required to carry out quantitative data analysis. It includes the organization and presentation of data, measures of central tendency, measures of variability, percentiles and z-scores, the normal distribution, random sampling distributions, probability, and statistical inference. Computer techniques are limited to the creation of data files and statistical analysis using SPSS.

Students are expected to understand simple mathematical procedures and to own a calculator that has the capacity to perform square roots. Calculators and textbooks should be brought to all statistics classes.

Courses requirements:

Class participation

Participation includes asking questions, answering questions, discussing links to other things, and thinking about implications. It is important to come to class with some notes and reflections on the material. For each class, the instructor will take notes of the quality and quantity of participation of each student, and the extent to which this participation is based on the text having read in advance. The class participation accounts 10% of the final grade.

Assignments

An emphasis will be on the application of the many concepts and techniques covered in class and through the required readings in the textbooks. Through a series of 3 assignments accounting for 10% each of the final grade, students will have an opportunity to apply what they have learned and subsequently obtain some feedback. Each assignment will be marked and returned, some will be discussed in class, and students can always meet with the instructor to discuss possible difficulties or concerns.

Short tests

There will be 2 short tests throughout the term. They will contain multiple choice and possibly short answer questions. These tests will be held in the regular classroom during class. The material covered

between tests will be the major focus of each test, although the exact details will be specified clearly in class well before each test. **THE TWO TESTS WILL BE WORTH 30% OF YOUR FINAL GRADE.**

Final Examination

The final examination will be scheduled during the final exam period. It will be 3 hours in length and may have multiple choice, short answer problems and major problems. Students are responsible for the entire statistics portion of the course for the final examination. The final exam accounts for 30% of the final grade.

Distribution of Grades

Class participation	10%
2 tests	30%
3 assignments	30%
Final exam	30%

Specific issues with online activities

(1) Copyright Compliance:

I understand and agree that all instructional, reference, and administrative materials to which I am given access in this course (the "course materials"), whether they consist of text, still or kinetic images, or sound, whether they are in digital or hard copy formats, and in whatever media they are offered, are protected in their entirety by copyright, and that to comply with this copyright and the law.

(1) I may access and download the course materials only for my own personal and non-commercial use for this course; and

(2) I am not permitted to download, copy, store (in any medium), forward or share, transmit, broadcast, show, post or play in public, adapt, or change in any way any text, image, or sound component of the course materials for any other purpose whatsoever except as expressly authorized, and only to the extent authorized, in writing, by the course instructor.

I further understand and agree that, if I infringe the copyright of the course materials in any way, I may be prosecuted under the Lakehead University Student Code of Conduct – Academic Integrity, which requires students to act ethically and with integrity in academic matters and to demonstrate behaviours that support the University's academic values.

(2) Exam/Assignment Integrity:

I understand and agree that:

(1) Unless otherwise allowed by the course instructor, I must complete the assignments in this course without the assistance of anyone else.

(2) Unless otherwise allowed by the course instructor, I must not access any sources or materials (in print, online, or in any other way) to complete any course exam.

I further understand and agree that, if I violate either of these two rules, or if I provide any false or misleading information about my completion of course assignments or exams,

I may be prosecuted under the Lakehead University Student Code of Conduct – Academic Integrity, which requires students to act ethically and with integrity in academic matters and to demonstrate behaviours that support the University’s academic values.

Outline and schedule (the following schedule may be modified slightly throughout the term)

January 11	Introduction and Basic Math Operation
January 13	Chapter 1
January 18	Chapter 2
January 20 &25	Chapter 3
January 27	Chapter 4
	Assignment #1 (Due Feb. 10)
February 1	Chapter 5
February 3	Chapter 6
February 8	Chapter 7
February 10	Test # 1
February 15-19	Reading Week
February 22 &24	Chapter 8
March 1	Chapter 9
	Assignment #2 (Due Mar. 17)
March 3	Chapter 10
March 8&10	Chapter 11
March 15&17	Chapter 12
March 22	Test # 2
March 24&29	Chapter 13
March 31	Assignment #3 (Due April 12)
April 7	Chapter 14
April 12	REVIEW

NB. The dates for class coverage of topics are only best approximations.