

SOCI 212 – Statistics I (3 credits)
Winter 2026

Instructor: Dr. Mark Paradis

Email: mark.paradis@concordia.ca

Office Hours: Wednesdays from 16:10-17:00 in H-1125-28

- If you will attend office hours, please let me know before the end of class.

Class Time: Wednesdays and Fridays from 14:45-16:00

Class Location: H 421 SGW

This course provides an introduction to the basic principles of statistics for social scientists. Topics include sampling and measurement; univariate statistics (data visualization, measures of location, and measures of variation); univariate distributions; and bivariate statistics (data visualization; correlation and regression; contingency tables; and controls). Students will learn the theory and calculation of these statistics. Students will also learn the implications of these statistical techniques for theoretical understanding of sociology and anthropology by applying these statistics in the lab to real-world data. To aid students gain the strongest possible understanding of statistics, the course will be a mixture of lectures to present theory and exercises to gain greater comfort using these techniques.

COURSE FORMAT

This class will be held in-person on campus. If any classes must be missed due to instructor sickness or an academic commitment, an online, asynchronous lecture will take place. For any online lecture, every effort would be made to make the lecture available before the scheduled class time.

COMMUNICATIONS POLICY

For emails with the instructor, every effort will be made to respond within 24 hours on weekdays. On weekends, the delay may be longer. For emails, you will be expected to:

1. Include the course number, course section, and purpose of the email in the email subject.
If the course number and section are not included, the email will be deleted.
2. Do not send follow-up emails within 24 hours or on weekends. If you do, *both the original and follow-up emails will be ignored.*
3. *If your email is asking about facts found directly in the syllabus, it will be ignored* (for example, asking about the date of the midterm). The syllabus is made available to all students and it is disrespectful to expect the instructor to look up something when you are unwilling to do so.

COURSE RESOURCES

Statistical Tools:

- A calculator: You should bring a calculator to each lecture, quiz, and test. Note: If you forget a calculator for quizzes and tests, I do NOT carry extra calculators with me.

- SPSS
 - SPSS is a statistical software that we will be using in our labs. It is available free of charge through the Concordia website. Details can be found at: <https://www.concordia.ca/it/services/spss.html>.

Suggested Reading:

- Paradis, Mark. 2026. *Quantitative Methods for Social Sciences: An Introduction to Statistics*. 1st English Edition. <https://www.amazon.ca/dp/B0GGBDYPV4>
 - We will discuss course readings on the first day of class. I suggest waiting to purchase until that time.

Reading Resource:

- Wilcox, Rand. 2012. *Modern Statistics for the Social and Behavioral Sciences – A Practical Introduction*. New York: CRC Press.
 - This book is not required, nor necessarily recommended. However, it is the best book on statistics in the social sciences that I've ever found. It goes in greater depth than you would need at the undergraduate level, but also does a fantastic job of explaining introductory concepts in an accessible manner. I will use some concepts and examples from this book in lectures.

REQUIREMENTS

Quizzes (2 x 12.5%): 25%

To assess student understanding of the material and to help prepare for the midterms, there will be three quizzes.

- Quizzes will only cover material covered since the last quiz (or since the beginning of the semester for quiz 1).
- Calculators are permitted for the quizzes.
- Students will be expected to show their work for all questions requiring calculations. Grading will be based on whether you use the correct procedures, rather than whether you get the correct answer.
- Quiz 1 on January 30 at the start of class.
- Quiz 2 on February 11 at the start of class.

Midterms (2 x 25%): 50%

To assess student understanding of the material, there will be two midterm exams.

- The first midterm will cover topics covered until midterm 1.
- Midterm 2 will cover topics covered throughout the course, but heavily weighted towards topics covered after midterm 1.
- Calculators are permitted for the midterms.
- Students will be expected to show their work for all questions requiring calculations. Grading will be based on whether you use the correct procedures, rather than whether you get the correct answer.
- Midterm 1 on February 20.
- Midterm 2 is March 20.

Lab Assignment: 25%

To gain practical experience using statistical techniques with real-world sociological data, we will have a lab assignment using SPSS at the end of the semester. For the lab, students may work in groups of 2-3 students. The lab assignment is due on April 15 at 16:00 on Moodle.

LATE POLICY

Lab assignments that are not turned in on time will be penalized 5% per day. Late assignments will not receive any comments and will not be accepted more than a week late. If you are having any problems in handling the course load, please speak to me ASAP. There are more solutions available if you approach me early. Late quizzes and midterms will not be accepted. There will be no make-up midterms and quizzes, and no alternative assignments.

RE-GRADES

If you believe that your grade on an assignment does not reflect the quality of your work, it is your right to request a re-grade. However, you must follow these steps:

1. You must wait 7 days before requesting a re-grade.
2. You must submit a written statement detailing why you believe your grade should be changed. You should point to specific areas of your exam/paper that you believe were graded unfairly AND explain why.
3. I will then re-grade your ENTIRE assignment. I reserve the right to RAISE or LOWER your grade.
4. After the re-grade, if you still believe that your grade is unfair, you must then follow the Department's procedures for re-grades.

CHANGES TO THE SYLLABUS

I reserve the right to amend the schedule of meetings and assignments listed in this syllabus as might become necessary based on events throughout the semester. Any changes to the syllabus will be announced and students will receive an amended syllabus in writing. Copies of the most up-to-date syllabus can be found on the course website on Moodle

SCHEDULE

Legend: Regular Class, Asynchronous Class, Evaluation, Lab, No Class

Wednesday, January 14

- Topic: Introduction to the Course
- Evaluation: None
- Reading: Chapter 1

Friday, January 16

- Topic: Introduction to Statistics
- Evaluation: None
- Reading: Chapter 2 (omit section on Levels of Measurement)

Wednesday, January 21

- Topic: Sampling and Measurement
- Evaluation: None
- Reading: Chapter 5

Friday, January 23

- Topic: Sampling and Measurement
- Evaluation: None
- Reading: Chapter 2 (section on Levels of Measurement)

Wednesday, January 28 (asynchronous lecture)

- Topic: Data Visualization
- Evaluation: None
- Reading: Chapter 6

Friday, January 30

- Topic: Data Visualization
- Evaluation: Quiz 1 (covers material from January 16 to January 23)
- Reading: Chapter 6 (continued); Study for Quiz 1

Wednesday, February 4

- Topic: Measures of Location
- Evaluation: None
- Reading: Chapter 7

Friday, February 6

- Topic: Measures of Location
- Evaluation: None
- Reading: Chapter 7 (continued)

Wednesday, February 11

- Topic: Distributions and Measures of Variation
- Evaluation: Quiz 2 (covers material from January 28 to February 6)
- Reading: Chapter 8; Study for Quiz 2

Friday, February 13 (No class)

- Topic: Study Day
- Evaluation: None
- Reading: None

Wednesday, February 18

- Topic: Distributions and Measures of Variation
- Evaluation: None
- Reading: Chapter 8 (continued)

Friday, February 20

- Topic: None
- Evaluation: Test 1 (covers material from January 16 to February 18)
- Reading: None

Wednesday, February 25 (asynchronous lecture)

- Topic: Correlation and Regression
- Evaluation: None
- Reading: Chapter 10

Friday, February 27

- Topic: Correlation and Regression; Contingency Tables and Control
- Evaluation: None
- Reading: Chapter 10 (continued); Chapter 14.1, 14.2, 14.3.1

Wednesday, March 4 (Reading Week)

- Topic: None
- Evaluation: None
- Reading: None

Friday, March 6 (Reading Week)

- Topic: None
- Evaluation: None
- Reading: None

Wednesday, March 11

- Topic: Contingency Tables and Control
- Evaluation: None
- Reading: Chapter 14.1, 14.2, 14.3.1 (continued)

Friday, March 13

- Topic: Introduction to Probability
- Evaluation: None
- Reading: Chapter 11

Wednesday, March 18

- Topic: Introduction to Probability
- Evaluation: None
- Reading: Chapter 11 (continued)

Friday, March 20

- Topic: None
- Evaluation: Test 2 (covers material from February 25 to March 18)
- Reading: None

Wednesday, March 25 (asynchronous lab preparation)

- Topic: SPSS Installation
- Evaluation: None
- Reading: None

Friday, March 27

- Topic: Lab
- Evaluation: Lab Assignment (progress)
- Readings: None

Wednesday, April 1 (asynchronous lab progress)

- Topic: Lab
- Evaluation: Lab Assignment (progress)
- Readings: None

Friday, April 3 (No Class – Good Friday)

- Topic: None
- Evaluation: None
- Reading: None

Wednesday, April 8

- Topic: Lab
- Evaluation: Lab Assignment (progress)
- Readings: None

Wednesday, April 15

- Evaluation: Lab Assignment due at 16:00 on Moodle

GRADING SCHEME

Letter Grade	Numeric Grade (%)	Description
A+	90.0 – 100.0	Outstanding
A	85.0 – 89.9	
A-	80.0 – 84.9	
B+	77.0 – 79.9	Average – Very Good
B	73.0 – 76.9	
B-	70.0 – 72.9	
C+	67.0 – 69.9	Satisfactory
C	63.0 – 66.9	
C-	60.0 – 62.9	
D+	57.0 – 59.9	Marginal Pass
D	53.0 – 56.9	
D-	50.0 – 52.9	
F/FNS	0.0 – 49.9	Poor – Failure

INTELLECTUAL PROPERTY

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PLAGIARISM

The most common offense under the Academic Code of Conduct is plagiarism, which the Code defines as “the presentation of the work of another person as one’s own or without proper acknowledgement.” This includes material copied word for word from books, journals, Internet sites, professor’s course notes, etc. It refers to material that is paraphrased but closely resembles the original source. It also includes for example the work of a fellow student, an answer on a quiz, data for a lab report, a paper or assignment completed by another student. It might be a paper purchased from any source. Plagiarism does not refer to words alone—it can refer to copying images, graphs, tables and ideas. “Presentation” is not limited to written work. It includes oral presentations, computer assignment and artistic works. Finally, if you translate the work of another person into any other language and do not cite the source, this is also plagiarism.

In simple words: Do not copy, paraphrase or translate anything from anywhere without saying where you obtained it! (Source: The Academic Integrity Website: Concordia.ca/students/academic-integrity)

EXTRAORDINARY CIRCUMSTANCES:

For undergraduate courses & courses that are cross-listed with graduate courses:

In the event of extraordinary circumstances and pursuant to the [Academic regulations - Concordia University](#) - Concordia University, the University may modify the delivery, content, structure, forum, location and/or evaluation scheme. In the event of such extraordinary circumstances, students will be informed of the changes.

STUDENTS WITH DISABILITIES

Concordia University is working to create inclusive learning environments. Please notify me if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. You are also encouraged to contact the Access Centre for Students with Disabilities (ACSD) as soon as possible so that this office can assist with the necessary accommodations.

SEXUAL HARASSMENT

As a professor, one of my responsibilities is to help create a safe learning environment for my students and for the campus as a whole. If you have experienced sexual harassment, sexual violence or discrimination, Concordia's Sexual Assault Resource Centre provides information available resources: <https://www.concordia.ca/students/sexual-assault.html>.