

**SOCIOLOGY 2205A-002**  
**Statistics for Sociology**  
**Fall 2025**

**Delivery Method: in-person**

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**COURSE DESCRIPTION**

An introduction to the techniques of statistical analysis used by sociologists, including descriptive statistics, the normal curve, hypothesis testing and various measures of association.

***Prerequisite(s):*** None.

***Anti-requisite(s):*** [Biology 2244A/B](#), [Economics 2122A/B](#), [Economics 2222A/B](#), [Geography 2210A/B](#), [Health Sciences 3801A/B](#), [MOS 2242A/B](#), the former Psychology 2810, the former Psychology 2820E, [Psychology 2811A/B](#), [Psychology 2830A/B](#), [Psychology 2850A/B](#), [Psychology 2851A/B](#), Social Work 2207A/B, [Statistical Sciences 2035](#), [Statistical Sciences 2141A/B](#), [Statistical Sciences 2143A/B](#), [Statistical Sciences 2244A/B](#), [Statistical Sciences 2858A/B](#).

**COURSE OBJECTIVES AND LEARNING OUTCOMES**

Sociology 2205 is an introductory course designed to help you conduct and interpret basic quantitative analyses of social issues. The class will cover elementary statistical concepts and methods used in sociology and other social sciences. The emphasis is understanding the science and art of analysis and interpretation of findings. The material in this course can be roughly divided into two parts

- 1) The first part will cover **descriptive statistics**. Here we will learn how to summarize and describe data, first one variable at a time and then pairs of variables. We will learn basic numerical and graphical methods appropriate for categorical and continuous variables.
- 2) The second part will be **inference**, where we will learn how to generalize results obtained from a sample to the population. This part will start with the basic logic of inference, focusing on the importance of sampling distributions. Then we will apply the general approach to univariate and bivariate hypothesis tests and confidence interval calculations appropriate for categorical and continuous variables.

After a successful completion of the course, you will be able to

- Understand and appreciate statistics' role in social science
- Comprehend basic statistics used in industry, government, and academic reports
- Independently conduct elementary quantitative analysis of data
- Explain the logic of statistical inference
- Critically assess the presentation of statistical data in everyday life

## **COURSE MATERIALS**

1.

**Textbook “Introductory Statistics 2e”** (second edition) by Illovsky and Dean (2024), OpenStax, Rice University. This is a great textbook, available **FREE** online at <https://openstax.org/details/books/introductory-statistics-2e>. You can view the chapters online or download pdfs. If you wish, you can also buy a printed version for a reasonable price. We will only cover select chapters and chapter sections; I will indicate which sections to read each week.

2.

**Statistical software Stata, installed on your laptop** (yes, this is **REQUIRED**). Please purchase a **6-month license for Stata Version BE** from <https://www.stata.com/order/new/edu/profplus/student-pricing/> for \$48 USD.

Stata must be installed before the second class. Note [Stata-compatible operating systems](#): you will need a laptop; you cannot install the app on your phone or most tablets. We will be using Stata all through the semester and access is necessary. The installation may require a bit of patience but it's not too bad if you follow the instructions!

You will not need Stata for exams, but the exams will include questions requiring your understanding of Stata commands and output. You will need Stata for class work, homework, and assignments.

Stata is also available in campus computer labs and through a remote login system. However, please be aware that both options are much less convenient: lab access limits your flexibility, and students find the remote option technically challenging (I am not able to provide tech support for it). For that reason, I strongly recommend using your own laptop. If you don't have one, please try to borrow one for the term. Almost any laptop (even an older one) will work — you don't need special specs.

3.

**Calculator.** Any will do, even the cheapest dollar-store calculator will be fine. Scientific calculators are not needed but are allowed.

## **COMMUNICATION**

1. **The primary method of communication will be in-class announcements**, typically also written on course slide decks and/or posted on Brightspace. If you miss a class, ask classmates about announcements and missed class material. Students are also responsible for checking the course on Brightspace on a regular basis for news and updates.

2. **Post questions on the Forum on our course Brightspace site.** We will aim to respond within 48 hours during the work week; we are not able to respond during breaks and weekends.

3. **Pose questions in class**

4. **You are always welcome to pop in during student hours!** No need to sign up beforehand, just show up, we will be happy to see you.

5. **Email:** If you have a question specific to your personal situation, you can email your teaching team at [SOC2205.W25@gmail.com](mailto:SOC2205.W25@gmail.com). We will aim to respond within 48 hours; faster turnaround times around deadlines and other times when urgent issues may arise.

If your question is about course material (rather than a personal situation), we may suggest posting it on the Brightspace forum in our reply. That way, everyone benefits from the answer -- your classmates may be wondering the same question, after all.

## **METHOD OF EVALUATION**

The evaluation methods described in the course outline are essential requirements for the course.

### **Evaluation Breakdown**

1. Weekly in-class quizlets	10%
2. Weekly homework assignments	10%
3. Midterm exam, in class during class time	28%
4. Final exam, time and place TBD	36%
5. Two assignments, each worth 8%	16%

- 1. Weekly in-class quizlets.** During most or all classes, we will have a short 5-question quizlet on Brightspace. The goal: encourage class attendance and engaging with class material.  
**The lowest 3 scores will be dropped from final grade calculation.** This can be low scores or zeroes on missed quizlets. This is a universal accommodation that covers all medical, personal, technical, connection, or any other circumstance or problem. No further accommodation is possible.
- 2. Weekly homework assignments.** Most or all weeks you will upload assigned homework problems to Brightspace assignment tab. The homeworks will be graded as pass/fail; the aim is to encourage regular work on the class material.  
**The lowest 3 scores will be dropped from final grade calculation.** This is a universal accommodation that covers all medical, personal, technical, connection, or any other circumstance or problem. No further accommodation is possible.
- 3. Midterm.** Paper-and-pencil, closed-book exam, mostly or exclusively multiple choice, during regular class period. Calculators are allowed. I will provide a formula sheet and statistical tables as needed. The midterm has been designated as requiring supporting documentation (that is, self-attestation is not allowed to skip or reschedule it).
- 4. Final exam.** Paper-and-pencil, closed-book exam, mostly or exclusively multiple choice. Calculators are allowed.
- 5. Assignments.** Two assignments of equal value focused on practicing independent data analysis with Stata. Detailed instructions will be posted on Brightspace at least 10 days before deadline.

**Makeup exams.** There will be one makeup date for the midterm and one for the final. The dates are set by the Sociology Department. They are available **only** to students with official excuse through the Academic Counselling Office. **Your instructor cannot make any exceptions.** If you have another university-excused absence for the makeup midterm, your midterm weight will be added to your final exam's weight. If you have another approved absence from the makeup final, the Sociology Department schedules an additional sitting in May 2026, together with winter-term students.

**Extra credit (up to 6 percentage points).** Each week, I will award up to 6 points for correct, helpful, timely, and supportive answers to student questions in Brightspace discussion forum. Over the semester, each student can earn up to 6 points in total. Points are allocated holistically, based on the quality and usefulness of responses rather than the number of posts. A running tally will be updated weekly in Brightspace gradebook.

- **Weekly cap (class level):** Up to 6 percentage points in total may be distributed across all contributors each week. For example, one student may earn 3 points plus two students 0.75 points each in some week, or five students may earn 1 point each.
- **Semester cap (individual level):** A student can earn up to 6 percentage points total over the semester. For example, if you earn 1 point on three different weeks and 2 points on another week, that's 5 percentage points total on top of your class grade. So if your overall grade is 79%, say, with the 5 bonus points your final grade will be 84%.

## **STUDENT ABSENCES AND ACCOMMODATIONS**

To make sure everyone is treated fairly, all accommodations must go through the official university system. I'm not able to make individual exceptions outside that process, but I will fully support all academic considerations approved through Academic Advising.

If you are unable to meet a course requirement due to illness or other serious circumstances, please follow the procedures below.

University policy on academic considerations are described [here](#). This policy requires that all requests for academic considerations must be accompanied by a self-attestation. Further information about academic considerations, and information about submitting this self-attestation with your academic consideration request may be found here. Please note that any academic considerations granted in this course will be determined by the instructor, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline.

Students must familiarize themselves with the [Policy on Academic Consideration – Undergraduate Students in First Entry Programs](#). Students missing course work for medical, compassionate or extenuating circumstances can request academic consideration by completing a request at the central academic consideration portal. Students are permitted one academic consideration request per course per term without supporting documentation. Note that supporting documentation is **always** required for academic consideration requests for examinations scheduled by the office of the registrar (e.g. December and April exams) and for practical laboratory and performance tests typically schedule during the last week of the term. Students should also note that the instructor may designate one assessment per course per term that requires supporting documentation (the midterm exam). This designated assessment is described elsewhere in this document. Please note that any academic considerations granted in this course will be determined by the instructor of this course, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline. Supporting documentation for academic considerations for absences due to illness should use the [Student Medical Certificate](#) or, where that is not possible, equivalent documentation by a health care practitioner.

Students with an approved absence from an in-class test or exam will be required to write a makeup exam. Course professor or teaching assistant(s) may not be available to respond to questions during the makeup exam. Students should be aware that the make-up test will not necessarily be in the same format, be of the same duration, or cover the same material as the original test.

## **CLASS STRUCTURE**

The classes will combine lectures on key concepts with student participation, individual and group exercises, hands-on work using Stata, problem solving, etc.

## **IMPORTANT DATES, COURSE SCHEDULE AND READINGS.**

Sept 9	<b>Week 1. Introduction</b> Chapter 1: intro, 1.1-1.3
Sept 16	<b>Week 2. Descriptives for categorical variables</b> Chapter 1: 1.2, 1.3 Chapter 2: intro. Bar graph text in 2.1
Sept 23	<b>Week 3. Descriptives for continuous (quantitative) variables</b> Chapter 2: intro, 2.1-2.7
Sept 30	<b>Week 4. Probability, distributions</b> Chapter 3: intro, 3.1. Chapter 4: intro, 4.1, 4.2. Chapter 5: intro, 5.1. 5.2.
Oct 7	<b>Week 5. The Normal distribution</b> Chapter 6: intro, 6.1, 6.2 <b>Assignment 1 due October 7 at 9pm</b>
Oct 14	<b>Week 6. Sampling distributions</b> Chapter 7: intro, 7.1-7.3
Oct 21	<b>Week 7. Hypothesis tests about a population mean, confidence interval</b> Chapter 9: intro, 9.1, 9.3-9.5 Chapter 8: intro, 8.1, 8.2
Oct 28	Week 8. No new material <b>Midterm exam on October 28 in class, 4:30-6:00 pm.</b>
<b>Reading week November 3-9</b>	
Nov 11	<b>Week 9. Hypothesis tests about two population means</b> Chapter 10: intro, 10.1, 10.3
Nov 18	<b>Week 10. Chi square test for pairs of categorical variables</b> Chapter 3: 3.4 Chapter 11: intro, 11.1, 11.3-11.4
Nov 25	<b>Week 11. Correlation and regression for pairs of continuous variables</b> Chapter 12: intro, 12.1-12.4
Dec 2	<b>Week 12. Correlation and regression, continued.</b> No new readings <b>Assignment 2 due December 2 at 9pm</b>
Dec 9	<b>Week 13. Review</b>

**Final exam: TBD.**

Please note: Schedule and readings are subject to change.

## **USE OF GENERATIVE AI**

AI tools (like chatGPT, Claude, Gemini, or dozens of other models) can be powerful learning partners. I strongly encourage you to use them to learn and clarify concepts, better understand Stata commands, or check statistical interpretations. These tools can also help you brainstorm, edit for clarity and style, and polish written work. While AI may assist you, you are accountable for ensuring that your work is correct, original, and that you could reproduce or explain it independently.

- You may use AI tools to support your work, but you are solely responsible for the content and quality of everything you submit.
- For assignments and homeworks, you must run and present your own Stata code, results, tables, and figures; AI-generated results are not permitted.
- You may use AI to help interpret your Stata output, but the coding itself must follow what we cover in class.
- Exams are paper-and-pencil: AI is not permitted.
- Academic integrity applies fully: plagiarism or unacknowledged reliance on AI (or any source) violates university policy.

Full disclosure: this section of the syllabus was prepared with help of ChatGPT 5.

## **ELECTRONIC DEVICES**

Laptops are permitted in class but only for class-related use. Phones and other devices are not permitted. Absolutely no electronic devices are allowed during exams – that means no phones, no tablets, no laptops, and no wearables. Simply having a phone or wearable on you or within reach constitutes potential academic offense.

**Academic Offences:** Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following website: [https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf)

Students must write their assignments in their own words. Whenever students take an idea from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major scholastic offence.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<https://www.turnitin.com/>).

Students are expected to retain all research notes, rough drafts, essay outlines, and other materials used in preparing assignments. In the unlikely event of concerns being raised about the authenticity of any assignment, your instructor may ask you to produce these materials; an inability to do so may weigh heavily against you.

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

**Copyright:** Students may not record or distribute any class activity, including conversations during office hours, without written permission from the instructor, except as necessary as part of approved accommodations for students with disabilities. Any approved recordings may only be used for the student's own private use.

**Absence from Course Commitments:** Students must familiarize themselves with the [Policy on Academic Consideration](#) – Undergraduate Students in First Entry Programs [https://uwo.ca/univsec/pdf/academic\\_policies/appeals/academic\\_consideration\\_Sep24.pdf](https://uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf)

Students missing course work for medical, compassionate or extenuating circumstances can request academic consideration by completing a request using the Student Absence Portal (SAP) [https://registrar.uwo.ca/academics/academic\\_considerations/index.html](https://registrar.uwo.ca/academics/academic_considerations/index.html) . Students are permitted one academic consideration request per course per term without supporting documentation. Note that supporting documentation is always required for academic consideration requests for examinations scheduled by the office of the registrar (e.g. December and April exams) and for practical laboratory and performance tests typically scheduled during the last week of the term. Students should also note that the instructor may designate one assessment per course per term that requires supporting documentation. This designated assessment is described in the course outline. Supporting documentation for academic considerations for absences due to illness must include the completed Western Student Medical Certificate (SMC) <https://registrar.uwo.ca/academics/pdfs/student-medical-certificate.pdf> or, where that is not possible, equivalent documentation by a health care practitioner. Students must request academic consideration as soon as possible and no later than 48 hours after the missed assessment.

Once the request and supporting documentation have been received and reviewed, appropriate academic consideration, if granted, shall be determined by the instructor in consultation with the academic advisor, in a manner consistent with the course outline. Students with an approved absence from an in-class test or exam will be required to write a makeup exam, unless otherwise specified in the course outline. The course instructor or teaching assistant(s) may not be available to respond to questions during the makeup text/exam. Students should be aware that the make-up test/exam will not necessarily be in the same format, be of the same duration, or cover the same material as the original test/exam.

**Note:** missed work can *only* be excused through one of the mechanisms above. Being asked not to attend an in-person course requirement due to potential COVID-19 symptoms is **not** sufficient on its own. Students should check the Western website to see what directives for Covid are to be followed. Western has been and will continue to follow directives established by the Middlesex-London Health Unit. That directive will state whether students should or should not come to campus/class and any other requirements (e.g., masks are mandatory). Please check on your own and do not email the instructor, the Department Undergraduate Advisor/Coordinator or the Faculty Academic Counselling Office.

Students who fail to write a make-up test or special examination will receive a grade of zero on that assessment. No other make-up opportunities will be provided unless further academic consideration is granted by the student's Home Faculty Academic Counselling office.

**Religious Accommodation:** Students should review the policy for Accommodation for Religious Holidays [https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_religious.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf). Where a student will be unable to write examinations and term tests due to a conflicting religious holiday, they should inform their instructors as soon as possible but not later than two weeks prior to writing the examination/term test. In the case of conflict with a midterm test, students should inform their instructor as soon as possible but not later than one week prior to the midterm.

**Contingency plan for an in-person class pivoting to 100% online learning:** In the event of a COVID-19 resurgence or University approved emergency during the course that necessitates the course delivery moving away from face-to-face interaction, affected course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL Brightspace for students to view at their convenience). The grading scheme will **not** change. Any remaining assessments will also be conducted online as determined by the course instructor.

**Code of Student Conduct:** It is the responsibility of every student to read the Code and familiarize him or herself with its contents. The Code is available at [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/code\\_of\\_conduct.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/code_of_conduct.pdf). Sanctions for non-compliance range from a warning or reprimand to expulsion from the University.

**Student Responsibility:** Students in a degree program must select courses in accordance with the published requirements. Students are responsible for ensuring that their selection of courses is appropriate and accurately recorded, that all course prerequisites have been successfully completed, and



that they are aware of any antirequisite course(s) they may have taken. Students must familiarize themselves with the Student Responsibility for Course Selection policy [https://www.uwo.ca/univsec/pdf/academic\\_policies/general/academic\\_counselling.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/general/academic_counselling.pdf) and the Registration and Progression policy [https://uwo.ca/univsec/pdf/academic\\_policies/registration\\_progression\\_grad/registration\\_progression.pdf](https://uwo.ca/univsec/pdf/academic_policies/registration_progression_grad/registration_progression.pdf). Students are responsible for the successful completion of the Graduation Requirements for their degree program [https://uwo.ca/univsec/pdf/academic\\_policies/registration\\_progression\\_grad/graduation.pdf](https://uwo.ca/univsec/pdf/academic_policies/registration_progression_grad/graduation.pdf).

## **Support Services:**

Office of the Registrar Services <http://www.registrar.uwo.ca>

[Faculty Academic Advising](#) - Please visit your Home Faculty Academic advising webpage for information regarding adding/dropping courses, important dates, academic considerations for absences, appeals, exam conflicts, and many other academic related matters [https://registrar.uwo.ca/faculty\\_academic\\_counselling.html](https://registrar.uwo.ca/faculty_academic_counselling.html).

[USC services](#) offers information about student the health/dental plan, Bus Pass, food support services, Peer support Centre etc <http://westernusc.ca/services/>.

[Mental health](#) – Students who are in emotional/mental distress should refer to Mental Health@Western <http://www.uwo.ca/uwocom/mentalhealth/> for a complete list of options about how to obtain help.

[Health & Wellness Services](#) – Registered part-time and full-time students can book a physical health appointment at <https://www.uwo.ca/health/shs/index.html>. Additional on-campus services are also available <https://www.uwo.ca/health/shs/services/index.html>.

[Accessible Education](#) provides supports and services to students with disabilities at Western, in all programs and faculties. Students with disabilities or accessibility challenges should work with Accessible Education (formerly SSD) [http://academicsupport.uwo.ca/accessible\\_education/index.html](http://academicsupport.uwo.ca/accessible_education/index.html), which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing.

[Gender-Based and Sexual Violence](#) – Western is committed to reducing incidents of gender-based and sexual violence (GBSV) and providing compassionate support to anyone who is going through or has gone through these traumatic events. If you are experiencing or have experience GBSV (either recently or in the past), you will find information about support services for survivors, including emergency contacts at the following website: [http://uwo.ca/health/student\\_support/survivor\\_support/get-help.html](http://uwo.ca/health/student_support/survivor_support/get-help.html)

[Western Libraries](#) – Visit the many library locations on campus. Western Libraries provide access to material in physical and digital formats <https://www.lib.uwo.ca/catalogue/index.html>. Research support is available <https://www.lib.uwo.ca/research/index.html>.

[Writing support](#) – Online writing resources, writing support and writing modules are available <https://writing.uwo.ca/undergrads/>

**Bookstore:** Search for Textbook availability and cost <https://bookstore.uwo.ca/textbook-search>