



Brescia University College
School of Behavioural and Social Sciences
SOC 2205A – 531: Statistics for Sociology
Fall 2022

In the event of a COVID-19 resurgence during the course that necessitates the course moving away from in-person delivery, course content may be delivered online either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). There may also be changes to any remaining assessments at the discretion of the course instructor. In the event of a COVID-19 resurgence, detailed information about the impact on this course will be communicated by the Office of the Dean and by the course instructor.

General Information

Course Number: Sociology 2205A

Section Number: 531

Term & Year: Fall 2022

Delivery: In-Person

Course Day/Time: Tuesday 4:30-7:30PM

Course Location: Brescia, St. James Building, Room 136

Instructor Information

Name: Professor Michael Rooyakkers

Email: mrooyakk@uwo.ca

Office Hours: Tuesday 3:00-4:00PM, In-Person
(or by appointment, in-person or via Zoom)

Office Location: Ursuline Hall, Room TBD

Course Description

Inquiry in sociology, and other research-based disciplines, consists of theory, research methodology and statistics. The School of Behavioural & Social Sciences requires that all students who major or specialize in sociology take Sociology 2205, the introductory course in statistics. In this course, students will discover how one analyses the information obtained from various quantitative methodological techniques.

The course is divided into two major topics: descriptive and inferential statistics. Descriptive statistics involve procedures that we use to summarize or describe data, and includes a review of elementary mathematical concepts, the construction and interpretation of tables and graphs, and measures of central tendency and dispersion. Inferential statistics address the question of how well data drawn from a sample can be generalized to an entire population, and includes estimation and hypothesis testing.

This course does not require a strong mathematics background. While some basic mathematical skills are required, the emphasis is on understanding the role of statistics, and when and how to use them. Any student who is concerned about this aspect of the course should speak to me as soon as possible. Students are expected to understand simple mathematical procedures and to own (and know how to operate) a calculator that has the capacity to perform exponentiation and square roots.

Prerequisite(s): At least 60% average in 1.0 from Sociology courses at the 1000 level, or Thanatology 1025A/B.

Antirequisite(s): Biology 2244A/B, Economics 2122A/B, 2222A/B, Geography 2210A/B, Health Sciences 3801A/B, MOS 2242A/B, Psychology 2810, Psychology 2820E, 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.

Required Course Materials

1. **Textbook:** *Statistics: A Tool for Social Research and Data Analysis (5th Canadian Edition)* by Joseph F. Healey, Christopher Donoghue, and Steven G. Prus. Cengage Learning. ISBN-13: 9780177922047

Physical copies of the textbook are available at the Book Store at Western. An e-book version is also available. Both versions can be purchased online at the Book Store at Western website, at the following link: https://bookstore.uwo.ca/textbook-search?campus=BR&term=W2022A&courses%5B0%5D=531_BR/SOC2205A. The current 5th Canadian edition of the text is required.

2. **Calculator:** A calculator with exponential and square root functions is also required (for use during the course and exams). Complex calculators are not required.

Learning Outcomes & Brescia Competencies

By the end of this course, students will be able to:

(Brescia Competencies to which each learning outcome applies indicated in parentheses. Brescia competencies include Communication, Critical Thinking, Inquiry and Analysis, Problem Solving, Self-Awareness and Development, Social Awareness and Engagement, and Valuing: <http://brescia.uwo.ca/academics/brescia-competencies/>)

- 1) Distinguish between descriptive and inferential statistics and identify problems related to each (*Inquiry & Analysis; Critical Thinking*);
- 2) Choose the appropriate statistical tool for a variety of research problems (*Problem Solving; Critical Thinking*);
- 3) Analyze data from research problems using the appropriate statistical procedures and interpret the results of these analyses (*Communication; Critical Thinking; Inquiry & Analysis; Problem Solving*);

- 4) Critically examine scientific and popular press reports of research findings, identifying both good and bad analyses and interpretations (*Critical Thinking; Inquiry & Analysis*);
- 5) Interpret published research results in order to describe social phenomena and make informed choices and decisions (*Social Awareness & Engagement*);

Teaching Methodology and Expectations of Students

Teaching methods will include lectures, class discussion, and in-class activities. Lectures will include material from your readings as well as material not covered in your readings. It is expected that you complete the readings each week before coming to class, and that you come to class prepared. This means that it is expected that you have read the material closely, and that you are ready to engage with the material in class. We will frequently work through practice statistical problems in class, which will provide you with opportunities to actively engage with the material. The more involved you are with the course and with the readings, the better your experience and learning will be.

A calculator and the course textbook should be brought to all classes. A calculator will be necessary for completing practice problems in class. Additionally, the textbook is helpful to have on hand in order to refer to materials in the text during class. In particular, the appendices contain important information that we will often refer to in class in order to complete in-class activities, including practice problems.

I. How to Contact Me

If you have a question or would like to discuss course material with me, there are three avenues through which you can contact me:

1. **Office Hours** – You may come see me during office hours. I will hold scheduled in-person office hours every Tuesday before class from 3:00-4:00PM. I will also be available to meet with you by appointment. You may book an appointment with me through email, and we will arrange to meet at a mutually convenient time. When meeting by appointment, we can meet in-person (at my office) or virtually (via Zoom) – whichever is most comfortable or convenient for you.
2. **Email** – If you wish to reach me via email, please be advised that I will respond to your message within two “business days”. I endeavor to respond to emails quickly. Anything later than 5:00pm on a weekday may not get answered until the following day. Emails sent on the weekend may not receive a response until Monday. Please also note that complex questions are difficult to answer via email, and so these questions are best asked during office hours rather than through email.
3. **OWL Messages** – Like emails, I will respond to your OWL message within two business days (and endeavor to respond sooner than that). Similarly, complex questions are best asked during virtual office hours.

II. Class Website (OWL)

OWL (owl.uwo.ca) will contain our course site. When you arrive at owl.uwo.ca, you will need to select our course site from the “Sites” drop-down menu. You can “Favourite” our course site, by selecting the star icon beside the course name. This will make it so that our course site is listed at the top of OWL and can be easily selected.

The OWL course site will be used to post course information, lecture notes, supplementary materials, suggested practice problems, and reminders. It is expected that you check OWL regularly in order to ensure that you are kept up to date on new and revised course content.

III. Attendance & Classroom Environment

Regular class attendance is essential to learning at the university level, especially in a course like this one, where considerable practice of important concepts occurs in the classroom, and where each element of the course serves as a building block for what follows. I strongly encourage you to come to class regularly in order to maximize your opportunities to learn. The best learning occurs in an environment of mutual trust and respect, and that is the environment I expect in my classroom. Cheating in any form is a violation of that trust, and will not be tolerated.

Chatting amongst yourselves during class while your instructor is talking is distracting to everyone else in the class and not conducive to learning. Instead, should there be course material you do not understand (and that requires clarification), don't hesitate to raise your hand. Questions and class discussion are encouraged in this manner so that it doesn't distract from the ability of others to learn.

IV. Email Communications

Email is our primary means of communication outside of class, and thus it is important to regularly check your Western email. If you are contacting me by email, please use your Western email address, and include “SOC 2205” in the subject line, followed by a description of your enquiry (e.g. “SOC 2205: Question about final exam”).

Generally speaking, you should expect that I will respond to your email enquiries within two “business days”. I will try my best to respond to email enquiries as soon as possible on weekdays. Anything later than 5:00pm on a weekday may not get answered until the following day. While I do check my email on the weekend, I can't promise to respond right away. If you send me email on the weekend, it may not get a response until Monday.

V. Laptop & Mobile Phone Policy

Laptops are permitted in class but are only to be used for note taking. I suggest that you print out the lecture notes for each class and make your own notes by hand - much of the note taking in class will involve working through practice questions together, which is more easily done with pencil and paper. Be sure that all cell phones are turned off or

silenced at the beginning of class and put away. If you're expecting an important phone call during class, and need to keep it on and available, just let me know.

VI. Grades

Grades for all course components, and final course grades, will be posted on OWL under 'Gradebook'. Please note that I cannot assign "extra work" in order to improve one's grade, or adjust grades on the basis of "need" – this would be unfair to the other students in the class who aren't given this opportunity. Your final grade in the course will consist solely of your performance on the stated course requirements – the two assignments, the midterm exam, and the final exam (please refer to the course evaluation section below).

Copyright and Intellectual Property

PowerPoint lecture slides and notes, lists of readings, in-class activities, assignment guidelines, and other components of the course materials are typically the intellectual property of the instructor. Unauthorized reproduction through audio-recording, video-recording, photographing, sharing on social media, or posting on course-sharing websites is an infringement of copyright and is prohibited. Such action may be considered a Code of Conduct violation and lead to sanctions.

Course Evaluation

1. Assignments

In a course such as this, regular practice and feedback are the best ways to ensure that the student has mastered the material covered. This feedback will be accomplished, in part, through two assignments. The assignments will consist of problems that are typical of those you will find on the mid-term test and final examination. The dates on which the assignments will be made available to you, and the dates on which they are due, are as follows:

	<u>Available on OWL:</u>	<u>DUE:</u>
Assignment #1	September 12, 2022	October 4, 2022
Assignment #2	October 28, 2022	December 6, 2022

Each assignment is worth **15%** of your final grade, for a total of 30%. Assignments are due by the BEGINNING OF CLASS (i.e. 4:30PM) on the due dates. You MUST hand in a hard copy of each assignment in class; any assignment submitted electronically will receive a grade of zero (0).

Each assignment deadline has a grace period of 48 hours. This means there will be no late penalty applied to an assignment that is submitted within 48 hours after the deadline. The grace period accounts for any unusual life events or challenges that may

occur at or near the deadline. You must email me before the deadline to let me know that you are submitting after the deadline and within the grace period, and to arrange how you will submit your assignment to me.

Late assignments, submitted after the 48-hour grace period, will be penalized at the rate of 10 percent per day late. Any assignment not received within 3 days of the grace period will receive a grade of zero (0).

While it is expected that students will discuss the assignments amongst themselves, all work submitted shall be the work of the individual student. Copying another student's work is unacceptable. Students who plagiarize each other's work will receive a grade of zero. Students should familiarize themselves with their rights and responsibilities, as outlined in Western's Academic Calendar, including what constitutes a Scholastic Offence.

2. Midterm Exam

There will be one mid-term exam on **Tuesday, October 18th in our regular classroom**. It will be TWO hours in length and take place during regular class time. The specific materials for which you are responsible for this exam will be announced in class, but will likely include all that has been covered to that point in the course. The exam is worth **30%** of your course grade. The exam may contain multiple choice and short & long answer questions.

3. Final Exam

The final examination will be during the December exam period – date and time set by the university registrar. It will be THREE hours in length. This exam will cover **ALL** of the materials of the course, although the emphasis will be on the material covered after the mid-term test. The final exam is worth **40%** of the final grade.

Evaluation Breakdown

Assessment/Component	Date/Deadline	Weight
Assignment #1	October 4	15%
Midterm Exam	October 18	30%
Assignment #2	December 6	15%
Final Exam	December Exam Period (TBD)	40%

Academic Accommodation

For course components worth 10% or more of the total course grade, please see the Academic Policies and Regulations section at the end of this course outline or consult the Academic Calendar.

Course Schedule

The following schedule provides an outline of the topics to be covered in the course. A standalone course schedule, as well as a graphic syllabus, will be provided to you on the OWL course site.

UNIT	DATE	TOPIC	READINGS
Unit 1 – Descriptive Statistics	Sep. 13	Introduction	Chapter 1
	Sep. 20	Basic Descriptive Statistics & Measures of Central Tendency and Dispersion	Chapters 2 & 3
	Sep. 27	The Normal Distribution	Chapter 4
	Oct. 4	ASSIGNMENT #1 DUE (15%) – Unit 1	
Unit 2 – Inferential Statistics	Oct. 4	Introduction to Inferential Statistics	Chapter 5
	Oct. 11	Estimation Procedures <i>(Return Assignment #1, Midterm Review)</i>	Chapter 6
	Oct. 18	MID-TERM TEST (30%) <i>2 hours during regular class time/room</i>	
	Oct. 25	Introduction to Hypothesis Testing; Hypothesis Testing with Means and Proportions: <i>The one-sample case</i>	Chapters 7 (<i>up to end of sec 7.4</i>) & 10
	Nov. 1	Reading Week – NO CLASS ☺	
	Nov. 8	Hypothesis Testing with Means and Proportions: <i>The two-sample case</i>	Chapter 11
	Nov. 15	Hypothesis Testing with Nominal and Ordinal Variables: Chi-square	Chapter 7 (<i>sec 7.5 onwards</i>)
Unit 3 – Bivariate Descriptive Statistics	Nov. 22	Measures of Association for Nominal Variables	Chapter 8
	Nov. 29	Measures of Association for Ordinal Variables	Chapter 9*
	Dec. 6	ASSIGNMENT #2 DUE (15%) – Units 2 & 3, except Dec. 7 (Ch. 13)	
	Dec. 6	Hypothesis Testing and Measures of Association for Interval-Ratio Variables <i>Course wrap up</i> <i>Final exam review (as time permits)</i>	Chapter 13

* While other measures are discussed, you are only responsible for Gamma & Spearman's Rho

Notes:

1. Readings are from the text by Healey, Donoghue, and Prus, 5th Canadian Edition.
2. The topics will be covered in the order listed, and the dates listed are meant as a guideline.
3. Chapters 12 and 14 from the text will not be covered in this course; you are not responsible for this material.

The FINAL EXAMINATION will be held during the December exam period, December 10-22. It will be THREE hours in length and cover ALL the materials of the course, with an emphasis on material after the midterm. The examination is worth 40% of your course grade.

2022-23 BRESCIA UNIVERSITY COLLEGE ACADEMIC POLICIES AND REGULATIONS

1. POLICY REGARDING ACADEMIC ACCOMMODATION

The complete policy regarding Accommodation for Illness - Undergraduate Students can be found at

https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_135

Students who have long-term or chronic medical conditions which may impede their ability to complete academic responsibilities should seek Academic Accommodation through Student Accessibility Services

(https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_10).

Personal commitments (e.g., vacation flight bookings, work schedule) which conflict with a scheduled test, exam or course requirement are **not** grounds for academic accommodation.

Students who experience an illness or extenuating circumstance sufficiently severe to temporarily render them unable to meet academic requirements may submit a request for academic consideration through the following routes:

1. For medical absences, submitting a **Student Medical Certificate (SMC)** signed by a licensed medical or mental health practitioner;
2. For non-medical absences, submitting **appropriate documentation** (e.g., obituary, police report, accident report, court order, etc.) to their Academic Advisor. Students are encouraged to contact their Academic Advisor to clarify what documentation is acceptable.

Request for Academic Consideration for a Medical Absence

When a student requests academic accommodation (e.g., extension of a deadline, a makeup exam) for work representing 10% or more of the student's overall grade in the course, it is the responsibility of the student to provide acceptable documentation to support a medical or compassionate claim. All such requests for academic accommodation **must** be made through an Academic Advisor and include supporting documentation.

Academic accommodation for illness will be granted only if the documentation indicates that the onset, duration and severity of the illness are such that the student could not reasonably be expected to complete their academic responsibilities. Minor ailments typically treated by over-the-counter medications will not normally be accommodated.

The following conditions apply for students seeking academic accommodation on medical grounds:

1. Students must submit their Student Medical Certificate (SMC) along with a request for relief specifying the nature of the accommodation being requested no later than two business days after the date specified for resuming responsibilities. An SMC can be downloaded from https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf;
2. In cases where there might be an extended absence or serious issue, students should submit their documentation promptly and consult their Academic Advisor for advice during their recovery period;
3. Whenever possible, students who require academic accommodation should provide notification and documentation in advance of due dates, scheduled tests or examinations, and other academic requirements;
4. Students **must** communicate with their instructors **no later than 24 hours** after the end of the period covered by the SMC to clarify how they will fulfil the academic expectations they may have missed during the absence;
5. Appropriate academic accommodation will be determined by the Dean's Office/Academic Advisor in consultation with the course instructor(s). Academic accommodation may include extension of deadlines, waiver of attendance requirements, arranging Special Exams (make-ups), re-weighting course requirements, or granting late withdrawal without academic penalty.

2. ACADEMIC CONCERNS

If you feel that you have a medical or personal challenge that is interfering with your work, contact your instructor and Academic Advisor as soon as possible. Problems may then be documented and possible arrangements to assist you can be discussed at the time of occurrence rather than on a retroactive basis. Retroactive requests for academic accommodation on medical or compassionate grounds are not normally considered.

If you think that you are too far behind to catch up or that your work load is not manageable, you should consult your Academic Advisor

(https://brescia.uwo.ca/enrolment_services/academic_advising/book_an_appointment.php). If you consider reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines; please contact your Academic Advisor or see the list of sessional dates in the Academic Calendar

(<https://www.westerncalendar.uwo.ca/SessionalDates.cfm?SelectedCalendar=Live&ArchiveID=>).

You should consult with the course instructor and the Academic Advisor who can help you consider alternatives to dropping one or more courses. *Note that dropping a course may affect OSAP eligibility and/or Entrance Scholarship eligibility.*

3. ABSENCES

Short Absences: If you miss a class due to a minor illness or other problems, check your course outline for information regarding attendance requirements and make sure you are

not missing a test or assignment. Cover any readings and arrange to borrow notes from a classmate. Contact the course instructor if you have any questions.

Please note that for asynchronous online courses, attendance or participation requirements maybe different than for synchronous or in-person courses.

Extended Absences: If you have an extended absence, you should contact the course instructor and an Academic Advisor. Your course instructor and Academic Advisor can discuss ways for you to catch up on missed work, and arrange academic accommodations if appropriate and warranted.

It is important to note that the Academic Dean may refuse permission to write the final examination in a course if the student has failed to maintain satisfactory academic standing throughout the year or for too frequent absence from the class or laboratory

(https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=5&SelectedCalendar=Live&ArchiveID=#Page_64).

4. SCHOLASTIC 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:

https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_20.

Students are responsible for understanding the nature of and avoiding the occurrence of plagiarism and other academic offences. Note that such offences include plagiarism, cheating on an examination, submitting false or fraudulent assignments or credentials, impersonating a candidate, or submitting for credit in any course without the knowledge and approval of the instructor to whom it is submitted, any academic work for which credit has previously been obtained or is being sought in another course in the University or elsewhere. Students are advised to consult the section on Scholastic Discipline for Undergraduate Students in the Academic Calendar.

If you are in doubt about whether what you are doing is inappropriate or not, consult your instructor, the Academic Dean's Office, or the Registrar. A claim that "you didn't know it was wrong" is not accepted as an excuse.

The penalties for a student guilty of a scholastic offence (including plagiarism) include refusal of a passing grade in the assignment, refusal of a passing grade in the course, suspension from the University, and expulsion from the University.

Plagiarism:

Students must write their essays and assignments in their own words. Whenever students take an idea or a passage 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 academic 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 the 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.

Computer-marked Tests/exams:

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. Software currently in use to score computer-marked multiple-choice tests and exams performs a similarity review as part of standard exam analysis.

5. PROCEDURES FOR APPEALING ACADEMIC EVALUATIONS

All appeals of a grade must be directed first to the course instructor. If the student is not satisfied with the decision of the course instructor, a written appeal is to be sent to the School Chair. If the response of the Chair is considered unsatisfactory to the student, they may then submit a written appeal to the Office of the Dean. If the student is not satisfied with the decision of the Dean, they may appeal to the Senate Review Board Academic (SRBA), if there are sufficient grounds for the appeal and if the matter falls within the jurisdiction of the SRBA. For information on academic appeals consult your Academic Advisor or see the Student Academic Appeals – Undergraduate in the Academic Calendar

https://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_14.

Note that final course marks are not official until the Academic Dean has reviewed and signed the final grade report for the course. If course marks deviate from acceptable and appropriate standards, the Academic Dean may require grades to be adjusted to align them with accepted grading practices.

6. PREREQUISITES

Unless you have either the prerequisites for a course or written Special Permission from the Dean to enroll in it, you will be removed from the course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisite(s).

7. SUPPORT**Support Services**

The Brescia University College Registrar's website, with a link to Academic Advisors, is at <http://brescia.uwo.ca/academics/registrar-services/>. Students can access supports through Brescia's Student Life Centre (<http://brescia.uwo.ca/life/student-life/>) and Learning Development & Success at Western (<https://www.uwo.ca/sdc/learning/>).

Mental Health and Wellness

Students may experience a range of issues that can cause barriers to your learning, such as increased anxiety, feeling overwhelmed, feeling down or lost, difficulty concentrating and/or lack of motivation. Services are available to assist you with addressing these and other concerns you may be experiencing. You can obtain information about how to obtain help for yourself or others through **Health & Wellness at Brescia**, https://brescia.uwo.ca/student_life/health_and_wellness/index.php

and **Health and Wellness at Western**, http://uwo.ca/health/mental_wellbeing/index.html.

Sexual Violence

All members of the Brescia University College community have a right to work and study in an environment that is free from any form of sexual violence. Brescia University College recognizes that the prevention of, and response to, Sexual Violence is of particular importance in the university environment. Sexual Violence is strictly prohibited and unacceptable and will not be tolerated. Brescia is committed to preventing Sexual Violence and creating a safe space for anyone in the Brescia community who has experienced Sexual Violence.

If you or someone you know has experienced any form of Sexual Violence, you may access resources at https://brescia.uwo.ca/safe_campus/sexual_violence/index.php.

Portions of this document were taken from the Academic Calendar, the Handbook of Academic and Scholarship Policy, and the Academic Handbook of Senate Regulations. This document is a summary of relevant regulations and does not supersede the academic policies and regulations of the Senate of the University of Western Ontario.
