



Brescia University College  
Department of Sociology  
**SOC 2205B – 531: Statistics for Sociology**  
Winter 2019

**Instructor:** Professor Michael Rooyakkers  
**Office Hours:** Wednesday & Thursday 2:30-3:30PM (or by appointment)  
**Office:** UH 353 (Ursuline Hall, Room 353)  
**Email:** [mrooyakk@uwo.ca](mailto:mrooyakk@uwo.ca)  
**Class:** Monday 12:30-1:30PM & Wednesday 12:30-2:30PM  
UH 30 (Ursuline Hall, Room 30)

### **Course Description**

Inquiry in Sociology consists of theory, research methodology and statistics. The Department of Sociology requires that all Sociology majors 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 2 major topics: descriptive and inferential statistics. Descriptive statistics involves 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 the calculation of measures of central tendency and dispersion. Inferential statistics addresses the question of how well data drawn from a sample can be generalized to an entire population and examines how variables in these samples are related to one another.

While it is important to note that this course does not require a strong mathematics background, recent secondary school mathematics or a university course will be an asset. 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. A memory register would be useful. Complex calculators are NOT required. Calculators and textbooks should be brought to all classes.

**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.

### **Learning Objectives**

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

*(Brescia Competencies to which each objective applies indicated in parentheses)*

- 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) Carry out basic statistical analyses for both descriptive and inferential problems and interpret their results (*Inquiry & Analysis; Communication; Problem Solving*);
- 4) Read both scientific and popular press reports of research findings more critically, identifying both good and bad analyses and interpretations (*Critical Thinking; Inquiry & Analysis*);
- 5) Understand the meaning of published research results and use those results to make informed choices and decisions (*Social Awareness & Engagement*);
- 6) Consider social (or other) issues in which they are interested and could attempt to understand & address through the use of social statistics (*Social Awareness & Engagement; Valuing; Inquiry & Analysis*); and
- 7) Undertake further training in statistics (*Self Awareness & Development*)

### **Required Text**

Statistics: A Tool for Social Research (4<sup>th</sup> Canadian Edition) by Joseph F. Healey, Steven G. Prus, and Riva Lieflander. Nelson Education. ISBN-13: 978-0-17-672508-2

### **How to Contact Me & Class Website (OWL)**

If you have a question or would like to discuss material further, please come see me during my office hours. If you are unable to make my office hours, you can book an appointment with me through email. If you wish to reach me via email, please be advised that I will respond to your message within two business days. However, non-urgent questions (questions that can wait until office hours or class) should be asked during class or during office hours rather than through email.

OWL ([owl.uwo.ca](http://owl.uwo.ca)) will be used to post course information, material (class notes, etc.) 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.

## Course Requirements

### **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.

	<u>Available on OWL:</u>	<u>DUE:</u>
<b>Assignment #1</b>	January 14, 2019	February 4, 2019
<b>Assignment #2</b>	March 11, 2019	April 3, 2019

Each assignment is worth **15%** of your final grade, for a total of 30%. Assignments are due at the BEGINNING OF CLASS on the due dates. Late assignments will be penalized at the rate of 10 percent per day late. Any assignment not received within 5 days of the due date will receive a grade of zero (0). **YOU MUST HAND IN A HARD COPY OF EACH ASSIGNMENT IN CLASS; ANY ASSIGNMENT SUBMITTED ELECTRONICALLY 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. Mid-Term Test**

There will be one mid-term test on **Wednesday, February 13<sup>th</sup> 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 test will be announced in class, but will likely include all that has been covered to that point in the course. The test is worth **30%** of your course grade. The test may contain multiple choice and short & long answer questions.

### **3. Final Exam**

The final examination will be during the April 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 chapters covered after the mid-term test. The final exam is worth **40%** of the final grade.

***Evaluation Breakdown***

Assignments:	30% (2 @ 15% each)
Midterm Test:	30%
Final Exam:	40%

**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 among 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.

**Email Communications**

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.

**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 practice questions and writing out calculations, which is more easily done with pencil and paper. Be sure that all cell phones are turned off at the beginning of class and put away. Phone use and texting are not permitted during class.

**Grades**

You will receive your assignment grades once assignments are returned to you. These grades, and your midterm and final exam grades, will be posted on OWL. 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.

**Course Schedule**

<b>DATE</b>	<b>TOPIC</b>	<b>READINGS</b>
Jan. 7, 9, 14, 16	Introduction to course and course materials <b>Descriptive Statistics</b> <ul style="list-style-type: none"> <li>• The Basics</li> <li>• Measures of Central Tendency</li> <li>• Measures of Dispersion</li> </ul>	Prologue Chapters 1, 2, 3
Jan. 21, 23	<b>The Normal Distribution</b> <ul style="list-style-type: none"> <li>• Z-Scores</li> <li>• Estimation Using the Normal Curve</li> </ul>	Chapter 4, Appendix A
Jan. 28, 30	<b>Introduction to Inferential Statistics</b> <ul style="list-style-type: none"> <li>• The Sampling Distribution</li> </ul>	Chapter 5
Feb. 4	<b>ASSIGNMENT #1 DUE (15%)</b>	
Feb. 4, 6, 11	<b>Estimation Procedures</b> <i>Return Assignment #1, Midterm Review</i>	Chapter 6
Feb. 13	<b>MID-TERM TEST (30%)</b> 2 Hours during regular class time/room	
Feb. 18, 20	<b>Reading Week – NO CLASS ☺</b>	
Feb. 25, 27	<b>Hypothesis Testing with Nominal and Ordinal Variables</b> <ul style="list-style-type: none"> <li>• Bivariate Tables</li> <li>• Chi Square</li> </ul>	Chapter 7
Mar. 4, 6	<b>Measures of Association for Nominal Variables</b>	Chapter 8
Mar. 11, 13	<b>Measures of Association for Ordinal Variables</b>	Chapter 9
Mar. 18, 20, 25, 27	<b>Hypothesis Testing with Means and Proportions</b> <ul style="list-style-type: none"> <li>• The One-Sample Case</li> <li>• The Two-Sample Case</li> </ul>	Chapter 10 Chapter 11
Apr. 1, 3	<b>Hypothesis Testing and Measures of Association for Interval/Ratio Variables</b>	Chapter 13
Apr. 3	<b>ASSIGNMENT #2 DUE (15%)</b>	
Apr. 8	<b>Course Wrap up</b> <i>Return Assignment #2, Final Exam Review</i>	

\* Readings are from Healey, Prus, and Lieflander, 4<sup>th</sup> Canadian Edition

**The FINAL EXAMINATION will be held during the April exam period, April 11-30. 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.**

## 2018-19 BRESCIA UNIVERSITY COLLEGE ACADEMIC POLICIES AND REGULATIONS

### 1. POLICY REGARDING MAKEUP EXAMS AND EXTENSIONS OF DEADLINES

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 her academic responsibilities. Minor ailments typically treated by over-the-counter medications will not normally be accommodated.

Students must submit their documentation 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. 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. Whenever possible, students who require academic accommodation should provide notification and documentation in advance of due dates, examinations, etc. Appropriate academic accommodation will be determined by the Dean's Office/Academic Advisor in consultation with the student's instructor(s). Academic accommodation may include extension of deadlines, waiver of attendance requirements for classes/labs/tutorials, arranging Special Exams or Incompletes, re-weighting course requirements, or granting late withdrawals without academic penalty

Please note that 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.

A UWO Student Medical Certificate (SMC) is **required** if a student is seeking academic accommodation on medical grounds. This documentation should be obtained at the time of the initial consultation with the physician/nurse practitioner or walk-in clinic. A SMC can be downloaded from: [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf) . The student must request documentation sufficient to demonstrate that her ability to meet academic responsibilities was seriously affected. Please note that under University Senate regulations documentation stating simply that the student "was seen for a medical reason" or "was ill" is **not** adequate to support a request for academic accommodation.

The full policy on requesting accommodation due to illness can be viewed at:

[http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\\_12](http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_12)

## 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. If you consider reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines (refer to the Registrar's website,

<http://brescia.uwo.ca/academics/registrar-services/> or the list of official sessional dates in the Academic Calendar, see the Sessional Dates tab at

<http://www.westerncalendar.uwo.ca/index.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.

**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

([http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=5&SelectedCalendar=Live&ArchiveID=#SubHeading\\_68](http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=5&SelectedCalendar=Live&ArchiveID=#SubHeading_68) ).

## 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:

[http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\\_20](http://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 (<http://www.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, she may then submit a written appeal to the Office of the Dean. If the student is not satisfied with the decision of the Dean, she may appeal to the Senate Review Board Academic (SRBA), if there are sufficient grounds for the appeal. For information on academic appeals you can consult your Academic Advisor or see the Student Academic Appeals – Undergraduate in the Academic Calendar

[http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\\_14](http://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/> . The website for the Student Development Centre at Western is <http://www.sdc.uwo.ca/> .



**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 learn more about mental health and wellness at Brescia at <http://brescia.uwo.ca/life/mental-health-wellness/>. Students who are in emotional/mental distress should refer to Health and Wellness at Western, [http://uwo.ca/health/mental\\_wellbeing/index.html](http://uwo.ca/health/mental_wellbeing/index.html), for information about how to obtain help for yourself or others.

**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 <http://brescia.uwo.ca/life/sexual-violence/>.

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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.