

Course Outline

Sociology 2205A (section 530) Statistics for Sociology

General Information

Term: Fall

Academic year: FW2022

Course Day and Time: Tuesdays, 11:30 - 12:30; Thursdays, 11:30 - 1:30

Course Location: Room 2001A

Instructor Information

Prof. E. Bell

Office: 321 Ursuline Hall, Brescia

Office Hours:

Tuesdays 12:30 - 1:30 Thursdays 1:30 - 2:30

Or by appointment:

eabell@uwo.ca

519-432-8353 ext.28236

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.

Antirequisite(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.

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

Required Course Materials

1) Textbook:

Healey, Joseph F., Steven G. Prus, and Riva Lieflander
2019 Statistics: A Tool for Social Research, Fourth Canadian Edition. Toronto: Nelson Education.

2) A pocket calculator that has a square root function (and preferably a memory). A complex calculator is not required.

Brescia Competencies

Brescia courses are designed to develop students' competencies in a number of different areas (see https://brescia.uwo.ca/about/competency_based_learning/index.php). This course is designed to create a learning environment in which you will develop your competency in:

- 1) *Critical thinking*: The ability to engage in thinking characterized by the rational, informed, independent, and open-minded exploration of issues, ideas, and events before accepting or formulating a conclusion.
- 2) *Inquiry and analysis*: the ability to ask questions, examine issues, and reach informed conclusions by breaking down complex issues, exploring evidence, and describing relationships among persons, things, or events.
- 3) **Problem solving**: the ability to create and execute a strategy to answer a question or achieve a goal. Includes being able to anticipate the consequence of a potential solution, select a strategy among several alternatives, and decide when an acceptable outcome has been reached.
- 4) *Communication*: The ability to exchange information and meaning across cultures, space, and time appropriately and correctly. This competency includes oral, written, and interpersonal communication, and the ability to use current or innovative media.
- 5) **Self awareness and development**: The ability to draw meaning, knowledge and value from honest and fair reflection and self-evaluation. Students are able to recognize their emotions and patterns of thinking, their impact on others, and make a commitment to personal growth.
- 6) **Social awareness and engagement**: The ability to respect and be open to diversity (e.g. cultural, religious, political) and social justice. Students take personal responsibility to actively engage in and contribute to creating positive change in local, regional, national, or global communities and societies.
- 7) *Valuing*, the ability to make decisions or choose actions based on the consistent application of principles expressing fundamental values that are accepted on account of reason or spiritual insight.

Learning outcomes for this course, and their relationship to the Brescia competencies

This course will create a learning environment in which you can enhance your ability to:

- 1) think analytically and statistically about the world around you (critical thinking, inquiry and analysis, social awareness and engagement);
- 2) evaluate empirical claims about the social world (critical thinking, inquiry and analysis, problem solving, self awareness and development, social awareness and engagement, valuing);
- 3) understand quantitative research reported in scholarly books and articles and in the media (critical thinking, inquiry and analysis, social awareness and engagement); and

4) conduct your own empirical research (all competencies).

This course will also help you to develop more specific skills, including your ability to:

- 5) calculate and interpret basic statistics including measures of central tendency and dispersion, the normal curve, and Z-scores;
- 6) perform and interpret inferential statistics, including basic parameter estimation and hypothesis testing;
- 7) calculate and interpret bivariate measures of association, including linear regression and prediction; and
- 8) choose the appropriate statistical procedures for the issue at hand.

Teaching Methodology and Expectations of Students

Course concepts will be explained in detail in class, where students will also have a chance to work through examples on their own. Students are expected to attend all classes and to contribute to classroom discussions.

Classroom Etiquette

PLEASE:

Do not use computers in class for any reason, except to take notes.

Turn **off** cell phones and other electronic devices (putting them on vibrate is not allowed), and **store them out of sight.**

Do not send or read emails or text messages while class is in session.

Refrain from speaking to a neighbour during class time, especially if someone (either the instructor or a fellow class member) is speaking to the class, as this is distracting and not conducive to a good learning environment.

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.

Evaluation

There will be two in-class tests in this course, and a final exam written in the December exam period.

Evaluation Breakdown:

Component	Weight	Date	
In-class test 1	30%	Thursday, October 13	
In-class test 2	30%	Thursday, November 17	
Final exam	40%	To be announced by Registrar's Office	

Academic Accommodation

See the Academic Policies and Regulations section at the end of this course outline or consult the Academic Calendar.

(PLEASE GO TO NEXT PAGE)

Course Content

Topics will be covered in the order listed.

Topic	Description	Textbook Readings
1) Introduction to statistics	Basic math review	Prologue
	Overview of statistical goals and concepts	Chapter 1
2) Descriptive statistics	Basic descriptive statistics: percentages, ratios, and rates; basic tables, charts and graphs	Chapter 2
	Measures of central tendency and dispersion	Chapter 3
	The normal curve	Chapter 4
3) Inferential statistics I	Sampling and sampling distributions	Chapter 5
	Estimating sample means and proportions	Chapter 6
4) Inferential statistics II	Introduction to hypothesis testing	Chapter 7, pp.207-212 only
	Hypothesis testing with means and proportions: the one-sample case	Chapter 10
	Hypothesis testing with means and proportions: the two-sample case	Chapter 11
	Hypothesis testing with more than two means: one-way analysis of variance	Chapter 12
	Correlation, regression, prediction, and hypothesis testing using interval-ratio variables	Chapter 13

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:

- 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.