

# Brescia University College Department of Sociology SOC 2205A – 530: Statistics for Sociology Intersession 2018

**Instructor:** Professor Michael Rooyakkers

**Office Hours:** Wednesday 4:00 – 5:00 PM (or by appointment)

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Class: Monday and Wednesday 1:00 – 4:00 PM

Brescia Univ. College Room 303

# **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 Social Work 1021A/B and 1022A/B.

Antirequisite(s): Biology 2244A/B, Economics 2122A/B, 2222A/B, Geography 2210A/B, Health Sciences 3801A/B, MOS 2242A/B, Psychology 2810, 2820E, 2830A/B, 2850A/B, 2851A/B, the former 2885, Social Work 2207A/B, the former 2205, Statistical Sciences 2035, 2141A/B, 2143A/B, 2244A/B, 2858A/B and the former 2122A/B (and Statistical Sciences 2037A/B if taken before Fall 2010).

# **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*);
- 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 (3<sup>rd</sup> Canadian Edition) by Joseph F. Healey and Steven G. Prus. Nelson Education. ISBN-13: 978-017-6562076

# **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 or talk to me before/after class. 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) 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.

	Available on OWL:	<u>DUE:</u>
Assignment #1	May 16, 2018	May 28, 2018
Assignment #2	June 6, 2018	June 20, 2018

Each assignment is worth **15%** of your final grade, for a total of 30%. Assignments are due at the <u>BEGINNING OF CLASS</u> 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 **Monday**, **June 4**<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 Intersession final exam period (June 25/26) – 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.

If it is observed that students are on social networking sites such as Facebook or Twitter, or using the laptop for reasons other than for the class, they will be told to put their laptop away and they will not be permitted to use it for the remainder of the class.

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**

DATE	ТОРІС	READINGS
May 14, 16	Introduction to course and course materials  Descriptive Statistics  The Basics  Measures of Central Tendency  Measures of Dispersion	Prologue Chapters 1, 2, 3
May 21	Victoria Day – NO CLASS ☺	
May 23	<ul><li>The Normal Distribution</li><li>Z-Scores</li><li>Estimation Using the Normal Curve</li></ul>	Chapter 4, Appendix A
May 28	<ul><li>Introduction to Inferential Statistics</li><li>The Sampling Distribution</li></ul>	Chapter 5
May 28	ASSIGNMENT #1 DUE (15%)	
May 28, 30	Estimation Procedures  Midterm Review (time permitting)	Chapter 6
June 4	MID-TERM TEST (30%) 2 Hours during regular class time/room	
June 6, 11	<ul> <li>Hypothesis Testing I and II</li> <li>The One Sample Case</li> <li>The Two Sample Case</li> </ul>	Chapter 7, 8
June 11, 13	<ul><li>Hypothesis Testing IV</li><li>Bivariate Tables</li><li>Chi Square</li></ul>	Chapter 10
June 13, 18, 20	<ul><li>Measures of Association</li><li>Nominal</li><li>Ordinal</li><li>Interval-Ratio</li></ul>	Chapter 11 Chapter 12 Chapter 13
June 20	ASSIGNMENT #2 DUE (15%)	

- \* Readings are from Healey and Prus, 3<sup>rd</sup> Canadian Edition
- \*\* The course syllabus is subject to minor revisions and variations in dates; dates indicated are approximate

The FINAL EXAMINATION will be held during the Intersession exam period, June 25-26. 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.

# 2017-18 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. Documentation shall be submitted as soon as possible to the student's Academic Advisor indicating the period of illness and when the student should be able to resume academic responsibilities. 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. Appropriate academic accommodation will be determined by the Dean's Office in consultation with the student's instructor(s). 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. 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.

Whenever possible, requests for academic accommodation should be initiated in advance of due dates, examination dates, etc. Students must follow up with their professors and Academic Advisor in a timely manner.

The full policy on requesting accommodation due to illness can be viewed at: http://westerncalendar.uwo.ca/2017/pg117.html

### 2. ACADEMIC CONCERNS

If you feel that you have a medical or personal problem 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 may not be considered.

If you think that you are too far behind to catch up or that your work load is not manageable, you should consult an 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 dates <a href="http://westerncalendar.uwo.ca/2017/pg7.html">http://westerncalendar.uwo.ca/2017/pg7.html</a>). 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.* 

The 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://westerncalendar.uwo.ca/2017/pg130.html)

### 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.

### 4. POLICY ON CHEATING & ACADEMIC MISCONDUCT

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 Web site:

http://www.uwo.ca/univsec/pdf/academic\_policies/appeals/scholastic\_discipline\_und ergrad.pdf.

Students are responsible for understanding the nature of and avoiding the occurrence of plagiarism and other academic offences. Students are urged to read the section on Scholastic Offences in the Academic Calendar. 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 Academic Misconduct in the Western Academic Calendar.

If you are in doubt about whether what you are doing is inappropriate or not, consult your instructor, the Student Services Centre, 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 (see Scholastic Offence Policy in the Western Academic Calendar).

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 signed by the student must be sent to the Department Chair. If the response of the department is considered unsatisfactory to the student, she may then submit a signed, written appeal to the Office of the Dean. Only after receiving a final decision from the Dean may a student appeal to the Senate Review Board Academic. A Guide to Appeals is available from the Ombudsperson's Office, or you can consult an Academic Advisor. Students are advised to consult the section on Student Academic Appeals under Academic Rights and Responsibilities in the Western Academic Calendar

(http://westerncalendar.uwo.ca/2017/pg112.html).

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

(http://www.uwo.ca/univsec/pdf/academic\_policies/exam/evaluation\_undergrad.pdf and http://www.uwo.ca/univsec/pdf/academic\_policies/exam/finalgrades.pdf).

### 6. PREREQUISITES

Unless you have either the prerequisites for a course or written special permission from your 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 is at <a href="http://brescia.uwo.ca/academics/registrar-services/">http://brescia.uwo.ca/academics/registrar-services/</a>. The website for the Student Development Centre at Western is <a href="http://www.sdc.uwo.ca/">http://www.sdc.uwo.ca/</a>.

# **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 <a href="http://brescia.uwo.ca/life/mental-health-wellness/">http://brescia.uwo.ca/life/mental-health-wellness/</a>. Students who are in emotional/mental distress should refer to Mental\_Health@Western <a href="http://www.uwo.ca/uwocom/mentalhealth/">http://www.uwo.ca/uwocom/mentalhealth/</a> for a complete list of options about how to obtain help.

### **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/.

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.