

Brescia University College, at
The University of Western Ontario

2012

Sociology 2205B: Statistics for Sociology
Section 531

Prof. E. Bell

Office: 213 Merici

Office Hours:

Mondays 2:00 - 3:00 pm

Wednesdays 1:00 - 2:00 pm

Or by appointment

Classes

Mondays

9:30 am - 12:30 pm

Room

MRW 152

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Course Description

This course provides an introduction to the techniques of statistical analysis used by sociologists, including descriptive statistics, the normal curve, hypothesis testing and various measures of association. Students will learn to calculate statistics by hand and by using statistical software.

A pocket calculator that has a square root function (and preferably a memory) is required for this course.

Textbook

Healey, Joseph F., and Steven G. Prus

2010 *Statistics: A Tool for Social Research, First Canadian Edition*. Toronto: Nelson Education.

Useful textbook resources can be found at: <http://www.healeystatistics.nelson.com/student/>.

Course Requirements*

1) Three computer assignments, worth a total of 10% of the final grade. A separate handout outlining what is required, deadlines, etc. will be provided.

2) Mid-term exam, worth 40% of the final grade, to be written in class on Monday, February 13, 2012.

3) Final exam, worth 50% of the final grade, to be written in the April exam period (scheduled by the Registrar).

*Notes:

- a) Normally, absences from examinations will be excused only on the basis of serious illness documented by a note from a physician. **In such cases, students are to contact the instructor *before* the exam is held.** Students will receive a score of zero for any unexcused absence from an examination. *The policies governing requests for academic accommodation applicable to this course are outlined in the Academic Policies section included at the end of this course outline.*
- b) It is possible to get a final grade ending in "9," e.g., 69%. Grades ending in "9" will not be "bumped up," e.g., a final grade of 69% will not be changed to 70%.

Classroom Etiquette

PLEASE:

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

Do not send or read e-mails or text messages during class time.

Turn off cell phones.

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.

Topics To Be Covered

Note: You are responsible for material designated as “optional” in the textbook unless you are told otherwise by the instructor.

Readings

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| 1) Introduction to statistics | Healey and Prus, ch.1,
Appendix H |
| 2) Descriptive statistics | |
| a) Percentages, Ratios and Rates; Basic Tables, Charts and Graphs | Healey and Prus, ch.2,
Appendices F and G |
| b) Measures of Central Tendency: Mode, Median, Fractiles, Mean | Healey and Prus, ch.3 |
| c) Measures of Dispersion: Index of Qualitative Variation, Range, Interquartile Range, Variance, Standard Deviation | Healey and Prus, ch.4 |
| d) The Normal Curve: Z-scores | Healey and Prus, ch.5 |
| 3) Inferential Statistics | |
| a) Sampling and Sampling Distributions | Healey and Prus, ch.6 |
| b) Estimation Procedures | Healey and Prus, ch.7 |
| c) Hypothesis Testing: One-sample case | Healey and Prus, ch.8 |
| d) Hypothesis Testing: Two-sample case | Healey and Prus, ch.9 |
| e) Hypothesis Testing: Analysis of Variance | Healey and Prus,
ch.10 |
| f) Hypothesis Testing: Chi Square | Healey and Prus,
ch.11 |

4) Bivariate Measures of Association

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|---|---------------------------|
| a) Introduction to Bivariate Association | Healey and Prus,
ch.12 |
| b) Measures of Association for Nominal Data: Phi, Cramer's V,
Lambda | Healey and Prus,
ch.13 |
| c) Measures of Association for Ordinal Data: Gamma,
Spearman's Rho | Healey and Prus,
ch.14 |
| d) Measures of Association for Interval-Ratio Data: Regression
and Prediction, Pearson's r | Healey and Prus,
ch.15 |

Course Antirequisites and Prerequisites

Antirequisites: All other university-level statistics courses at the 2000-level or above including the former Sociology 231, Social Work 2205, Psychology 2810, 2820E, and the former Health Sciences 2800 or the former Health Sciences 201.

Prerequisites: At least 60% in Sociology 1020 or 1021E.

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 on medical grounds 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. 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.

If supporting documentation is from a family physician, Hospital Urgent Care Centre or Emergency Department, or a walk-in clinic a UWO Student Medical Certificate (SMC) is **required**. To download an SMC go to <https://studentservices.uwo.ca/secure/index.cfm> and follow the link under "Medical Documentation". Documentation should be obtained at the time of the initial visit. If it is not possible to have an SMC completed by the attending physician, 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 document-ation stating simply that the student "was seen for a medical reason" or "was ill" is **not** considered adequate to support a request for academic accommodation. All documentation is to be submitted to an Academic Advisor.

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 statement of University policy regarding extensions of deadlines or makeup exams can be found at <http://www.westerncalendar.uwo.ca/2011/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, www.registrar.uwo.ca, for official dates). 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.

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

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.

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 Academic Rights and Responsibilities in the Western Academic Calendar.

6. PREREQUISITES AND ANTIREQUISITES

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 prerequisites.

Similarly, you will also be deleted from a class list if you have previously taken an antirequisite course unless this has the approval of the Dean. These decisions may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course because you have taken an antirequisite course.

7. SUPPORT SERVICES

The Brescia University College Registrar's website, with a link to Academic Advisors, is at http://www.brescia.uwo.ca/academics/registrar_services/index.html.

The University of Western Ontario Registrar's website is at
<http://www.registrar.uwo.ca/index.cfm>

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.