



**Western**  
UNIVERSITY · CANADA

Western University  
SOCIOLOGY 2205  
Distance Studies-Online Course

**Soc2205a - Statistics for Sociology**

**May-July 2016**

**Instructor: Bill Marshall**

Office Hours: Tues. 1-3 pm  
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### **1. BRIEF DESCRIPTION**

This introductory course covers both descriptive and inferential techniques. The 'descriptive' part includes techniques such as frequency tables and graphs, measures of central tendency and dispersion, standard scores and normal distribution. You are expected to learn which statistical techniques are most suitable to the type of data related to the research problem of your choice. You should come to realize that statistics are a vital part of the research process, not an afterthought. Analysis of data in practice often requires some knowledge about techniques of inferences. The section on 'inferential' statistics introduces you to measures of association, correlation, hypotheses testing, and simple regression models.

This course is mandatory for students registered in Year 2 of an Honors Specialization offered through the Department of Sociology. [Courses on the following antirequisite list are treated as substitutions for this course as follows:

1. Students who have taken a course from the following antirequisite list, will need to replace Sociology 2205A/B Statistics for Sociology with an additional 0.5 Sociology course at the 2200 level.
2. Students who have completed Social Work 2205 must replace both Sociology 2205A/B Statistics for Sociology and Sociology 2206A/B Research Methods in Sociology with 1.0 Sociology course(s) at the 2200 level.] **This list is not to be treated as comprehensive.**

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

**Prerequisite(s):** At least 60% in Sociology 1020 or 1021E.

**Course goals and objectives:** are based upon the premise that at the end of this course, the students will be ‘enlightened’ consumers of Social Science data.

- They will be able to comprehend the statistics used in academic reports.
- They will be able to differentiate between the various levels of measurement.
- They will understand the difference between descriptive and inferential statistics;
- They will know how to select appropriate statistics.

## **2. TEXTBOOKS**

This on-line course is mediated through OWL, now powered by Sakai.

If you are new to Western, OWL is a learning management system that provides a set of tools that are all web based. You use a web browser to view and interact with other students and course material in a manner similar to viewing web pages on the internet. For this course, in addition to OWL’s learning resources, you have a textbook and other on-line readings:

1. ***Statistics, A Tool for Social Research***, Third Canadian Edition, by Joseph F. Healey and Steven G. Prus, Nelson Education, 2016.

Text website link: [www.nelson.com/statistics3ce](http://www.nelson.com/statistics3ce)

You may choose to purchase the e-version of this textbook from Coursesmart at

[www.coursesmart.com](http://www.coursesmart.com)

The e-version costs about \$70 (for 6 months use), while the paperback costs about \$140.

It’s your choice. You may use older versions of the text, but topic coverage, and text chapters will not match the course outline, and you will not have access to all of the text resources.

2. ***Online Statistics: An Interactive Multimedia Course of Study (Web Version 2.0)***, by David Lane, Joan Lu, Camille Peres and Emily Zitek.

This is an introductory-level statistics book. The material is presented both as a standard textbook and as a multimedia presentation. The book features interactive demonstrations and simulations, case studies, and an analysis lab. This work is in the public domain. Therefore it can be copied, downloaded and reproduced in any way you wish, **without charge**.

This can be found at: <http://onlinestatbook.com/>

Students will also need a simple calculator, able to perform exponentiation and square roots, memory register would also be useful.

### **3. SUPPLEMENTARY TEXTS**

The concepts as well as techniques presented in this course are elementary, and, the above textbook is more than adequate. However, if you would like to see different presentations of the same concepts and techniques, you can refer to any of the following books - with one cautionary note on books on Statistics: If you are not quite familiar with the different mathematical symbols, do not try to read more than one book! (While most authors use similar notation, it is far from universal.) Once you are firmly grounded in concepts and symbols, you can go ahead with any other books available to you. All of the following are excellent references, which cover the same material as the texts, but in other ways; you may find one more to your liking:

1. Elementary Statistics for the Social Sciences by J. Anthony Capon, Wadsworth Publishers.
2. Introductory Statistics for Sociology by Judith Handel, Prentice-Hall Inc.
3. Basic Social Statistics by Wilbert M. Leonard II, Stipes Publishing
4. Descriptive and Inferential Statistics by M.J. Loether and D.G. McTavish, Allyn and Bacon Inc.
5. Simple Statistics: Applications in Social Research, T. D. Miethe and J.Gauthier

Students who are feeling "anxious" about the mathematical sections of the course may wish to read either of these:

1. How to Think About Statistics by John Phillips, Jr., W.H. Freeman Co.
2. Statistics Without Tears, by Derek Rowntree, Penguin Books.
3. Statistics for the Terrified, by John Kranzler, Prentice-Hall.
4. The Joy of Stats, by Roberta Garner, University of Toronto Press.
5. Statistics for People who (Think They) hate Statistics, by Salkind, SagePublications.

Students intending to continue on in Sociology may wish to develop some familiarity with computers and the SPSS statistical package. This can be most easily accomplished by reading the appropriate sections at the end of each chapter of the Healey text. (SPSS is covered in Soc2206)

### **4. SUGGESTED METHOD OF STUDY**

First, go through the UWO Soc2205a On-line Lecture notes and read the appropriate chapter. Next access "The Online Statistics Book" at <http://onlinestatbook.com> and read the appropriate section, and view the Multi-media simulations and demonstrations. When you understand the basic concepts introduced in a lecture, read the relevant sections in the textbook. At the end of each lecture, a tutorial is given. Do the exercises (mostly multiple choice, matching and/or problem-solving) given in the tutorial; check your answer with the answers supplied. If you score is lower than 60%, read the online lectures again as well as the suggested readings from the textbook. If your score lies between 60 and 80%, it would be a good idea to review the notes

again. If you get more than 80%, you may proceed to the next lecture but be sure you review the material you're unsure of. If you don't understand the material or have problems with the concepts introduced in a lecture, contact your instructor.

## **5. ASSIGNMENTS**

There are two graded assignments during the course, each pertaining to a particular section of the course. Assignment One is to be completed after Part I of the course (Descriptive statistics), this requires completion of Chapters 1 through 4 of the Healey textbook plus on-line materials.

Assignment Two, to be completed after Part II of the Healey text (Inferential Statistics), this requires completion of chapters 5,6,7,8 and 10, 11, 12.

All assignments should be submitted on or before the due date. However, if a valid reason prevents you from submitting an assignment on the due date, please inform the instructor, and Academic Counseling before **the due date**.

Assignments should be submitted electronically.

## **6. EXAMINATION**

There will be one 3-hour final examination, date to be set by the university registrar.

The Computer-marked multiple-choice parts of the final exam will be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

## **7. GRADING SCHEME**

Each assignment carries 25% of your final grade; thus the 2 assignments cover 50% and the final examination 50% of your final grade.

## **8. SCHEDULE OF ASSIGNMENTS, TESTS, AND EXAMINATIONS**

All assignments are due on the DAY INDICATED unless other arrangements have been made in advance. Late submissions will be penalized at the rate of 10%/day; after 5 days grade will be 0.

<b>ASSIGNMENT</b>	<b>DUE DATE</b>	<b>% OF FINAL GRADE</b>
1	May 31	25%
2	June 21	25%
Final Examination	To be scheduled by the registrar, August 2-5, 2016	50%

June 13, 2016 is the last day to (paper) drop the course without academic penalty.

## **9. INSTRUCTOR**

Your instructor for the Summer of 2016 will be: Bill Marshall;

Email: [marshal2@uwo.ca](mailto:marshal2@uwo.ca) Phone (519) 661-2111 ext. 85045

Virtual Office Hours: Tuesdays 1-3 PM, or by appointment

(In fairness to all students, office hours are online and by phone)

## **10. TOPICS COVERED**

The course is scheduled to run from May 9 to July 29, 2016, you should therefore try to cover approximately 2 chapters of the text, and associated lecture material each week.

- I. The basics: Healey and Prus (H): Preface, Prologue and CH 1, 2
- II. Measures of Central tendency: H, CH 3
- III. Dispersion: H, CH 3
- IV. Normal distribution: H, CH 4 (**Complete Assignment #1 NOW!**)
- V. Inferential Statistics: H, CH 5, 6, 7, 8
- VI. Chi Square and Nominal Tests of significance: H, CH 10, 11
- VII. Ordinal measures of association: H, CH 12
- VIII. Interval/Ratio measures of association: H, CH 13

Western University Summer course information can be found at:

[www.westerncalendar.uwo.ca/pdfs/Summer2016web.pdf](http://www.westerncalendar.uwo.ca/pdfs/Summer2016web.pdf)

## **Important Policies**

### ***A Note on Plagiarism:***

Students must write their assignments in their own words. Whenever students take an idea 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 scholastic offence (the Scholastic Offence Policy can be viewed in the Western Academic Calendar).

### **Plagiarism Checking:**

Students may be required to submit their assignments to turnitin.com on the class WebCT website after they are completed. These papers will be subject to submission for textual originality.

### ***Policy on Accommodation for Medical Illness***

Western's policy on Accommodation for Medical Illness can be found at [www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_medical.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf).

Students must see the Academic Counsellor and submit all required documentation in order to be approved for certain accommodation:

[http://counselling.ssc.uwo.ca/procedures/medical\\_accommodation.html](http://counselling.ssc.uwo.ca/procedures/medical_accommodation.html)

### ***Accessibility Options:***

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation. Information regarding accommodation of exams is available on the Registrar's website:

[www.registrar.uwo.ca/examinations/accommodated\\_exams.html](http://www.registrar.uwo.ca/examinations/accommodated_exams.html)

### **Students are not allowed to use Computers for the Final Exam.**

### ***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 the following web site:

[www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf)

### ***Mental Health:***

Students who are in **emotional/mental distress** should refer to Mental Health@Western ([http://uwo.ca/health/mental\\_wellbeing/](http://uwo.ca/health/mental_wellbeing/)) for a complete list of options how to obtain help.