

SOCIOLOG 2205B 570 Winter 2019-2020 Statistics for Sociology

Instructor Information:

Professor:	Dr. Don Kerr	Office #:	LH 208
Email:	dkerr@uwo.ca	Ext:	4438

Office Hours: Monday 12:30 - 2:15 p.m.

If you would like to meet with me during office hours at a location on campus other than my office, please let me know and we will make arrangements.

Class Times and Location(s):

Mondays, 2:30 - 5:30 pm in W174

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.

Antirequisites: Biology 2244A/B, Economics 2122A/B, Economics 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.

Prerequisites: At least 60% in 1.0 from Sociology courses at the 1000 level, or Thanatology 1025A/B.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this 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.

STATISTICS FOR SOCIOLOGY INTRODUCTION:

Some familiarity with Statistics is basic to social science. Knowledge of statistics will enable you to understand the professional research literature of your discipline, while broadening your ability to interpret the many research findings regularly encountered in everyday life. Statistical literacy will move you closer to reaching your full potential as a social scientist.

This course is required of all undergraduates in Sociology, and is a prerequisite for more advanced courses in sociology and related social sciences. This course introduces students to basic "descriptive" and "inferential statistics".

Students are expected to understand basic mathematical procedures, and <u>should own a scientific</u> <u>calculator with the ability to perform square roots</u>. Students will be expected to develop basic competencies in the analysis of sociological data, in order to best summarize and evaluate sociological information. The course is meant to provide students with a range of practical skills, while preparing them for more advanced courses in statistics. With a successful completion of this course, students should be well prepared for Sociology 3306 (Investigating Social Life: Quantitative Analysis), the advanced course in methods required for the Honors Specialization Degree in Sociology and the Honors Specialization Degree in Criminology at Kings University College.

COURSE INFORMATION: Professor: Dr. Don Kerr Office: LH 208 (2nd floor of the Labatt Hall Building) Phone: 519-433-03491 ext. 4438 E-mail: <u>dkerr@uwo.ca</u> Office Hours: Monday 12:30 - 2:15 p.m.

WEBSITE: http://dkerr.kingsfaculty.ca/

The course webpage is used to post lecture notes, periodically post announcements and assignments relating to this course. Also your grades will be posted on this website (password protected) as soon as they are available.

Text book:

The following textbook is a required resource for 2205B (570)

Healey/Prus/Lieflander Statistics: A Tool for Social Research, 4th edition

Course Requirement:

5 Problem solving assignments (5 worth 30% of course grade)

Midterm exam: 35%

Final exam: 35%

Problem solving assignments (30%)

The problem solving" assignments should help you in "applying" concepts learned in class. They tend to be quite detailed and "applied" in nature. They can also be quite time consuming, so be sure not to leave them to the last minute!

The types of questions on this assignment will look a lot like the problems you are expected to complete on the exams (so this is excellent practice).

These will be "HAND WRITTEN", "STAPLED", WELL ORGANIZED, and LEGIBLE!

If they are not readable, they will not be marked.

Be careful with all your calculations (follow recommended rounding procedures) and provide detail in answering these questions (here you will typically show all of your work in solving specific problems).

IN THE INTEREST OF FAIRNESS FOR ALL STUDENTS, BOTH PROBLEM SOLVING ASSIGNMENTS ARE DUE ON THE DATES NOTED. LATE ASSIGNMENTS WILL ONLY BE ACCEPTED WITHOUT PENALTY WITH APPROPRIATE DOCUMENTATION. ASSIGNMENTS RECEIVED AFTER THE DUE DATE (*BEGINNING* OF CLASS ON DATE INDICATED) WILL HAVE THEIR GRADE REDUCED BY A RATE OF 10 % DAILY. ANY EVIDENCE OF PLAGIARISM WILL RESULT IN A GRADE OF ZERO ON YOUR ASSIGNMENT.

Mid-term exam (35%)

The midterm exam will be 2 hours long. The materials will be drawn from the readings, lectures and first 2 "problem solving assignments". This test will involve a series of multiple choice questions as well as a set of problems that the students will be expected to solve, i.e. with detailed calculations (similar to the "problem solving assignments").

FOR AN UNEXCUSED ABSENCE FROM A TEST OR EXAM, A ZERO WILL BE RECORDED. IN THE INTEREST OF FAIRNESS TO ALL STUDENTS, AND IN PARTICULAR, TO THOSE THAT ADHERE TO THESE GUIDELINES, NO EXCEPTIONS WILL BE MADE. **IF YOU CANNOT TAKE A TEST OR EXAM (DUE TO ILLNESS OR OTHER JUSTIFIABLE REASON)** ON THE DAY IT IS SCHEDULED, YOU MUST CONTACT ME BEFORE THE EXAM OR DUE DATE (IN PERSON OR BY EMAIL).

Final Exam: 35%

The final exam will be three hours and held during the final examination period. This exam will involve a series of multiple-choice questions and a series of problems that students will be asked to solve and interpret. It will be cumulative, covering everything from the beginning of the term (although there will be much greater weight placed on the second half of the course).

FOR THE FINAL EXAM, ANY ILLNESSES OR CONFLICTS MUST BE DIRECTED TOWARD THE ACADEMIC DEAN'S OFFICE PRIOR TO THE EXAMINATION DATE. ANY FAILURE TO DO SO WILL LEAVE FOR A GRADE OF ZERO

COURSE SCHEDULE AND READINGS:

January 6. Basic Descriptive Statistics: Chapters 1, 2.

January 13. Measures of Central Tendency and Dispersion: Chapter 3

January 20. The Normal Curve: Chapter 4.

January 27: Inferential Statistics: Chapter 5 **Problem solving assignment # 1 due (2:30 p.m. sharp) – 6%** (Measures of central tendency and dispersion, the normal curve)

February 3: Estimation Procedures: Chapter 6

February 10. Hypothesis testing: one-sample case: Chapter 7 **Problem solving assignment # 2 due 2:30 p.m. sharp – 6%** (Confidence intervals)

February 17: READING WEEK

February 24. MID-TERM EXAM (35%)

March 2. Hypothesis testing: two-sample case: Chapter 8 and Chi Square Test: Chapter 10

March 9. Bivariate Association & Nominal Measures: Chapter 11 **Problem solving Assignment # 3 due (2:30 p.m. sharp) -6%** (One & two sample tests)

March 16 Ordinal Measures of Association: Chapter 12 **Problem solving Assignment # 4 due 2:30 p.m. sharp – 6%** (Chi Square test and nominal measures of association)

March 23. Interval Measures of Association: Chapter 13.

March 30. FINAL EXAM REVIEW **Problem solving Assignment # 5, due 2:30 p.m. - 6%** (Measures of association and regression)

Can pick up Assignment # 5 results prior to final exam (details forthcoming, as dependent on the timing of the final exam).

FINAL EXAM (final examination period) (35%)

* The above schedule many be modified slightly throughout the term.



Course Outline Policies 2019-2020

Faculty Office Hours

Office hours will be noted on course outlines. By mid-September and mid-January, office hours are posted on the King's website: <u>https://www.kings.uwo.ca/current-students/courses-enrolment/course-information/</u>.

Academic Consideration for Tests/Examinations

Students are responsible for seeking consideration as noted in the Western University Calendar: https://www.uwo.ca/univsec/pdf/academic_policies/exam/courseoutlines.pdf

How to Request Academic Consideration

Self-Reported Absence

Students may use the Self-Reported Absence System (SRAS) for a maximum of two short-term absences affecting course components worth 30% or less of the overall course grade. The SRAS may not be used during the December and April exam periods, or for any course components worth more than 30% of the overall course grade.

Other Requests for Academic Consideration

King's students should refer to information on the Academic Dean's Office website regarding requests for academic consideration that fall outside of the Self-Reported Absence System (SRAS). (https://www.kings.uwo.ca/current-students/courses-enrolment/exams-and-tests/medical-accommodation/)

UWO Policy on Accommodation for Medical Illness: <u>http://uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf</u> Student Medical Certificate (SMC) - <u>https://www.eng.uwo.ca/files/undergraduate/student-medical-certificate.pdf</u>

Support Services

Accessibility, Counselling and Student Development at King's University College https://www.kings.uwo.ca/current-students/student-services/

Students experiencing emotional or mental health distress can access services at King's University College http://www.kings.uwo.ca/current-students/campus-services/student-support-services/personal-counselling/

or Mental Health@Western for a complete list of options about how to obtain help. <u>https://www.uwo.ca/health/mental_wellbeing/</u>

Academic Support Services at King's University College

http://www.kings.uwo.ca/current-students/academic-support/

University Students Council - many valuable support services for students, including the health insurance plan http://westernusc.ca/services/

Accommodations for Religious Holidays

Students who have a Sabbath or Holy Day that conflicts with tests or exams must give written notice for accommodation by the deadlines noted in the policy above (minimum two weeks for term tests and examinations, and one week for mid-term tests). See

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf https://www.multiculturalcalendar.com/ecal/index.php?s=c-univwo

Remembrance Day Policy

Two minutes of silence observed on November 11 and 11:00 am throughout the university and that, where this is not possible, two minutes of silence be observed between 11:00 am and 12:00 noon.

Students are permitted to be absent from class to attend Remembrance Day Services, provided the instructor is informed in advance of the intended absence.

Statement on Use of Electronic Devices

Use of Electronic Devices

You are not allowed to have a cell phone, or any other electronic device, with you during tests or examinations.

Use of Laptops, Tablets, and Smartphones in the Classroom

King's University College at Western University acknowledges the integration of new technologies and learning methods into the curriculum. The use of electronic devices – such as laptop computers, tablets, or smartphones – can contribute to student engagement and effective learning. At the same time, King's recognizes that instructors and students share jointly the responsibility to establish and maintain a respectful classroom environment conducive to learning.

The use of electronic devices by students during lectures, seminars, labs, etc., shall be for matters related to the course at hand only. Students found to be using electronic devices for purposes not directly related to the class may be subject to sanctions under the Student Code of Conduct; see https://www.kings.uwo.ca/current-students/student-affairs/code-of-student-conduct1/

Inappropriate use of electronics (e.g., laptops, tablets, smartphones) during lectures, seminars, labs, etc., creates a significant disruption. As a consequence, instructors may choose to limit the use of electronic devices in these settings. In addition, in order to provide a safe classroom environment, students are strongly advised to operate laptops with batteries rather than power cords.

Statement on Academic Offences

King's is committed to Academic Integrity.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, is posted at http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

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; see <u>http://elearningtoolkit.uwo.ca/terms/plagiarism.html</u>

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.

Copyright re: Course Material

Lectures and course materials, including PowerPoint presentations, tests, outlines, and similar materials are protected by copyright. Faculty members are the exclusive owner of copyright in those materials they create. Students may take notes and make copies for their own use. Students may not allow others to reproduce or distribute lecture notes and course materials publicly (whether or not a fee is charged) without the express written consent of a faculty member. Similarly, students own copyright in their own original papers and exam essays. If a faculty member is interested in posting a student's answers or papers on the course web site he/she should ask for the student's written permission.

Class Cancellations

All reported class cancellations are posted at https://www.kings.uwo.ca/current-students/campus-life/service-disruptions/