

Sociology 2205A 570

Fall/Winter 2018-2019

STATISTICS FOR SOCIOLOGY

Instructor Information:

Professor:	D. Kerr	Office #:	DL312
Email:	dkerr@uwo.ca	Ext:	4438

Office Hours: Monday 9:30 - 12:30 p.m.

Class Times and Location(s):

Mondays 2:30 PM-5:30 PM in W168

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: DL 312 (3rd floor of the Dante Lenardon Building) Phone: 519-433-03491 ext. 4438 E-mail: <u>dkerr@uwo.ca</u> Office Hours: Monday 9:30 - 12:30 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 bundle is a required resource for this course.

Healey/Prus/Lieflander. Statistics: A Tool for Social Research, 4th Canadian edition + Aplia (digital homework solution).

The bundle is available for purchase from the Bookstore at Western. You can also purchase the Aplia standalone (digital only which includes an e-book access to the text for this course).

Course Requirement:

Aplia ON-LINE tutorials: 10%

Problem solving assignment #1 (prior to mid-term): 15%

Midterm exam: 30%

Problem solving assignment # 2 (prior to final) 15%

Final exam: 30%

APLIA ON-LINE tutorials (worth 10% of your final grade):

For Registration on Aplia, follow the prompts on the following link. You will be paying for access when you purchase your course package for Soc 2205 (be sure to purchase the appropriate package for Section 570).

Student Course Link: https://login.nelsonbrain.com/course/WEG2-TUXA-JDMB

If you already entered an access code or bought Aplia in your bookstore or online, simply login through the above link to register for the course. To check whether your computer meets the requirements for using Aplia, go to: https://www.aplia.com/support/sysreq.jsp

Aplia is an on-line resource whereby you will be completing 7 on-line tutorials. These tutorials are designed to help you better understand the statistical procedures as reviewed in this class, particularly on a conceptual level. These tutorials are by their nature "interactive", i.e. you can try to answer specific questions on these tutorials, and if you get them wrong, Aplia will tell you why you got them wrong, and then you can try the problem again (up to 3 attempts on each tutorial). You can MAXIMIZE your grade on these APLIA assignments, potentially receiving 100% for this portion of the course.

While Aplia tutorials are all currently available to students, tutorials 1-4 are all due on the same day, *Tuesday, October 15th, 2:30 p.m. sharp.* Similarly, all Aplia tutorials 5-7 are simultaneously due on *Friday, November 30th, 5:00 p.m. sharp. Warning: 1 second beyond the due date will be recorded one day late on the system.*

Tutorial 1 (marks 23), Tutorial 2 (marks 33) Tutorial 3 (marks 55), & Tutorial 4 (marks 42) – <u>Tuesday Oct 15</u>

Tutorial 5 (marks 42), Tutorial 6 (marks 39), and Tutorial 7 (marks 35) - Friday November 30

Total Grade across 7 assignments: (marks 269)

I recommend that you get an early start on these tutorials. For example, tutorials 1 and 2 can be completed after the September 17th lecture, whereas tutorial 3 can be completed after September 24th, etc. (for further detail on the timing of these tutorials, see the course outline below). Similarly, while tutorials 5-7 are due November 30th, you can also get an early start on these tutorials as well.

IF ANY SPECIFIC TUTORIAL IS LATE BEYOND THE CORRESPONDING DUE DATE (OCT 15TH OR NOV 30TH) <u>YOU WILL LOSE 10 MARKS DAILY ON THAT TUTORIAL UNTIL IT IS COMPLETE</u>. The Aplia assignments are worth 10% overall of your final grade. So for example, let's assume that you failed to complete "Tutorial 7" altogether (worth 35 marks) yet all your other tutorial work was perfect: you would earn 234/269 marks for your Aplia tutorials, or in other words, a grade of 86.99% on this portion of the course. On the other hand, if you handed it in 4 days late, you would still receive a grade of 86.99% (because the penalty, on an assignment worth 35 marks is -40 (-10 marks daily over 4 days). <u>Best to get everything</u> done well ahead of time to avoid these sorts of problems.

2 Problem solving assignments (15% each)

Whereas the Aplia tutorials are largely conceptual, the two "problem solving" assignments should help you in "applying" concepts learned in class. They tend to be more detailed and "applied" relative to the Aplia tutorials. They also require more time so do not leave them to the last minute!

The first "problem solving assignment" will cover all the chapters prior to the midterm, and is designed to help you prepare for your midterm exam. This will include everything up to Chapter 7 "Hypothesis Testing: One Sample Test".

The "second problem solving assignment" will be of the same format as the first, yet cover the second half of the course. This second assignment will serve as excellent preparation for the final exam.

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 (30%)

The midterm exam will be 2 hours long. The materials will be drawn from the readings, lectures, the APLIA tutorials and the first "problem solving assignment". This test will involve a series of multiple choice questions (similar to APLIA) 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 assignment").

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: 30%

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 largely be based on material covered after the mid-term exam (although inevitably some of the material covered in the first half is relevant to what is covered in 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

NEW THIS YEAR: Statistics Workshops for all King's students enrolled in Soc 2205

To do well in statistics, it is useful to practice the statistical procedures taught in class. At the end of each lecture, you will receive a series of "problems" that shall NOT be graded (nor will I provide you with the answer key to these problems). These problems are for your benefit in practicing and learning the material covered. The problems will look a lot like the problems encountered on the midterm and final exams.

To assist you with this, the Department of Sociology has scheduled "weekly workshops" beginning the week of September 17th. These weekly workshops will review the problems handed out at the end of each class. This is the only way to obtain the answer key for the problems supplied. I highly recommend that you attend these weekly tutorials, particularly if you fear passing this course.

These workshops will continue through to the end of the term (with the exception of reading week). These workshops will also include a review in December in assisting students to prepare for the final exam. They are "non-mandatory" but we "highly recommend" that you try to attend as many as possible. These workshops will be supervised by a Professor who is currently teaching Soc 2205.

COURSE SCHEDULE AND READINGS:

September 10th. Basic Descriptive Statistics: Chapters 1, 2.

September 17th. Measures of Central Tendency and Dispersion: Chapter 3 After this lecture, you can now complete Aplia #1 and Aplia #2

September 24. The Normal Curve: Chapter 4. After this lecture, you can now complete Aplia # 3

October 1: Inferential Statistics: Chapter 5 After this lecture, you can now complete Aplia #4

October 8: READING WEEK

October 15. Estimation Procedures: Chapter 6 (APLIA ASSIGNMENTS 1-4 DUE: 2:30 pm sharp).

October 22. Hypothesis testing: one-sample case: Chapter 7

October 29. Hypothesis testing: two-sample case: Chapter 8 (PROBLEM SOLVING ASSIGNMENT #1 DUE: 2:30 pm sharp)

November 5. MID-TERM EXAM

November 12. Chi Square Test: Chapter 10 After this lecture, you can now complete Aplia #5

November 19. Bivariate Association & Nominal Measures: Chapter 11 After this lecture, you can now complete Aplia #6

November 26. Ordinal Meaures of Association: Chapter 12 After this lecture, you can now complete Aplia #7

(APLIA ASSIGNMENTS 5-7 DUE FRIDAY NOVEMBER 30th: 5:00 p.m. sharp).

Dec 3. Interval Measures of Association: Chapter 13

(PROBLEM SOLVING ASSIGNMENT #2 DUE Friday December 7, 5:00 p.m. sharp: Deliver the assignment to me in person, my office: DL 312; third floor Dante Leanardon Building)

FINAL EXAM (final examination period).

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



Course Outline Policies 2018-2019

Faculty Office Hours:

Faculty office hours can be found on King's homepage under the menu heading Current Students (<u>http://www.kings.uwo.ca/current-students/courses-enrolment/planning/faculty-office-hours/</u>) and are also posted on the bulletin board across from the Administrative Assistants Office on the second floor of Dante Lenardon Hall.

Accommodations for Tests/Examinations:

Students are responsible for seeking accommodation with appropriate documentation, prior to writing tests/examinations, if they are of the view that their performance may be affected by extenuating circumstances.

How to Request Academic Accommodation – King's Students:

(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):

https://www.eng.uwo.ca/files/undergraduate/student-medical-certificate.pdf

Support Services:

Information about Accessibility, Counselling and Student Development (formerly Services for Students with Disabilities) at King's is available at https://www.kings.uwo.ca/current-students/student-services/

For emotional/mental health assistance see: <u>http://www.kings.uwo.ca/current-students/campus-services/student-support-services/personal-counselling/</u>

The website for Academic Services at King's University College is <u>http://www.kings.uwo.ca/current-students/academic-support/</u>

Students who are in emotional/mental health distress should refer to Mental Health@Western: <u>https://uwo.ca/health/services/students/index.html</u> for a complete list of options about how to obtain help.

University Students Council provides many valuable support services for students (including the health insurance plan) <u>http://westernusc.ca/services</u>/.

Accommodations for Religious Holidays:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf

NOTE: 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).

A calendar of religious holidays may be found here: <u>https://multiculturalcalendar.com/ecal/index.php?s=c-univwo</u>

Remembrance Day Policy:

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

That students be permitted to be absent from class to attend a 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 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 laptop computers 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 laptops by students during lectures, seminars, labs, etc., shall be for matters related to the course at hand only. Students found to be using laptops 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/kings/assets/File/currentStudents/studentLife/conduct/code of conduct 2003. pdf

Inappropriate use of laptops [or smart phones] 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, at the following Web site: 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. <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 power point 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. (Commercial use of Course material - http://umd.edu/legal/commercial.html)

Mailbox re Submission of Late Essays/Assignments ONLY:

Only late essays/assignments not handed in at class may be dropped off in the drop box, located between the inner doors of the Cardinal Carter Library. Essays dropped into the mailbox will be picked-up twice per day: once in the morning (9:30 a.m.) and in the afternoon (4:00 p.m.). All essays dropped off after 4:00 p.m. will be date-stamped the following business day. Essays should be placed in an envelope addressed to the professor with the course code and student number clearly indicated.

Class Cancellations:

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