Advanced Statistical Inference (PSYC 301)

Instructor: Dr. Leandre R. Fabrigar
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Field, A. (2024). *Discovering Statistics Using IBM SPSS Statistics* (6th Edition). Thousand Oaks, CA: Sage Publications.

Required Statistical Software (SPSS):

required): https://queensuca.sharepoint.com/sites/software-centre/SitePages/SPSS.aspx

Turnitin Statement

This course makes use of Turnitin, a third-party application that helps maintain standards of excellence in academic integrity. Normally, students will be required to submit their course assignments through onQ be included as source documents in the Turnitin reference database, where they will be used solely for the purpose of detecting plagiarized text in this course. Data from submissions is also collected and analyzed by Turnitin for detecting Artificial Intelligence (AI)-generated text. These results are not reported to your instructor at this time but could be in the future.

Turnitin is a suite of tools that provide instructors with information about the authenticity of submitted work and facilitates the process of grading. The similarity report generated after an assignment file is submitted produces a similarity score for each assignment. A similarity score is the percentage of writing that is similar to content found on the internet or the Turnitin extensive database of content. Turnitin does not determine if an instance of plagiarism has occurred. Instead, it gives instructors the information they need to determine the autythte-4(neso)11 a.(8eo63h4g/i)-4(ve)9(da)9(t)-4(aba)8(se)-3(o)11(f)1U0s6er L7i2cenbsa Agreement

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Course Objectives and Format:

This course is designed to provide students with an introduction to basic inferential statistics as they are used in psychology and related disciplines. Course lectures will provide students with a basic conceptual introduction to key statistical concepts in inferential statistics. Lectures will also provide a conceptual introduction to commonly used statistical procedures such as *t* Tests, One-Way ANOVA, Factorial ANOVA, correlation, and simple regression. Course labs will provide students with hands-on instruction in how to conduct statistical analyses using IBM SPSS Statistics.

Exams:

There will be two in-person exams. These exams will be a mixture of short answer, long answer, and essay questions. The midterm exam will include material covered in approximately the first half of the term. The final exam will cover material throughout the entire term, although a greater emphasis will be placed on material covered post-midterm. The final exam will be scheduled during the exam period at the end of the Fall term. The emphasis of exam questions will be on material covered in lecture, although some questions may be drawn exclusively from the text. The midterm will be weighted 34% of the total course mark and the final exam will be weighted 36% of the total course mark. It is expected that students will write both exams. If there is a valid medical reason or other important life circumstance that requires a student to miss the midterm exam, the general policy will be to proportionally prorate the midterm exam to the final exam and the remaining lab assignments. Exams are an essential component of the course and all students are required to complete at least one exam.

Labs Assignments:

Interspersed throughout the term will be 3 lab assignments. These lab assignments will focus on providing you with hands-on experience in conducting statistical analyses using SPSS. Lab assignments will be posted in onQ for download 9 days prior to their due date. Lab assignments will be submitted for marking in onQ. Each lab assignment will be weighted 10% of your total course mark. It is expected that

Weekly Instructor Office Hours:

The instructor will hold a weekly office hour session each week. The instructor will be in his office during this time. During that time, the instructor will answer any questions you might have regarding lecture material and the course more generally.

Teaching Assistants, Lab Sections, and Lab Office Hours:

Krista Jones (Head TA)
      Email: kmj7@queensu.ca
      Office Hour: Friday (9:30 AM   10:30 AM)

Ava Camposarcone
      Email: ac267@queensu.ca
      Lab Section (B, 003)
      Office Hour: Wednesday (4:30 PM   5:30 PM)

Louis Chitiz:
      Email: lssc1@queensu.ca
      Lab Section (E, 006)
      Office Hour: Tuesday (2:00 PM   3:00 PM)

Carolina de Barros
      Email: wfjg@queensu.ca
      Lab Section (G, 008)
      Office Hour: Tuesday (1:00 PM   2:00 PM)

Carina Pham
      Email: cp136@queensu.ca
      Lab Section (A, 002) (C, 004)
      Office Hour: Friday (9:00 AM   10:00 AM)

Samantha Shang
      Email: xs11@queensu.ca
      Lab Section (F, 007)
      Office Hour: Monday (3:00 PM   4:00 PM)

Charlie Shen
      Email: ms370@queensu.ca
      Lab Section (D, 005)
      Office Hour: Thursday (10:30 AM   11:30 AM)

Grading: Midterm Exam (34%)
              Lab Assignment 1 (10%)
              Lab Assignment 2 (10%)
              Lab Assignment 3 (10%)
              Final Exam (36%)

6. **Courage**   To develop and sustain communities of integrity, it takes more than simply believing in the fundamental values. Translating the values from talking points into action -- standing up for them in the face of pressure and adversity   requires determination, commitment, and courage.

Students are responsible for familiarizing themselves with and adhering to the Senate regulations concerning academic integrity, along with Faculty or School specific information. Departures from academic integrity include, but are not limited to, plagiarism, use of unauthorized materials, facilitation, forgery and falsification. Actions which contravene the regulation on academic integrity carry sanctions that can range from a warning, to loss of grades on an assignment, to failure of a course, to requirement to withdraw from the university.

Accommodations for Disabilities

Queen's University is committed to working with students with disabilities to remove barriers to their academic goals. Queen's Student Accessibility Services (QSAS), students with disabilities, instructors, and faculty staff work together to provide and implement academic accommodations designed to allow students with disabilities equitable access to all course material (including in-class as well as exams). If you are a student currently experiencing barriers to your academics due to disability related reasons, and you would like to understand whether academic accommodations could support the removal of those barriers, please visit the QSAS website to learn more about academic accommodations or start the registration process with QSAS by clicking Accommodation at **Ventus | Accessibility Services | Queen's (queensu.ca)**

VENTUS is an online portal that connects students, instructors, Queen's Student Accessibility

Students are encouraged to submit requests as soon as the need becomes apparent and to contact their instructor and/or course coordinator as soon as possible once academic consideration has been granted. Any delay in contact may limit the options available for academic consideration.
For more information on the Academic Consideration process, what is and is not an extenuating circumstance, and to submit an Academic Consideration request, please see the Faculty of Arts and
[Academic Consideration website](). ASO courses include links to information on **Academic Consideration** on your **Course Homepage** in onQ.

Please see the Teaching Team page for contact information for your instructor and TA(s), where relevant.

If you need to request academic consideration for this course, you will be required to provide the following name and email address to ensure it reaches our team accordingly:

Course Coordinator Name: Tara Karasewich
Course Coordinator email address: psyc.accom@queensu.ca

Students are encouraged to submit requests as soon as the need becomes apparent and to contact their
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	-Understanding and interpreting correlations -Alternative measures of association -Simple regression and prediction -Standard error of estimate -Hypotheses for Regression -Standard and Unstandardized Solutions -Hypotheses for Regression	
Week 11 (Nov. 19, 21)	**Hypotheses with Continuous Variables: Correlation and Regression (Continued)** -Characterizing relationships between continuous variables -The Pearson correlation coefficient -Understanding and interpreting correlations -Alternative measures of association -Simple regression and prediction -Standard error of estimate	Ch. 8, 9
Week 12 (Nov. 26, 28, Dec. 3)	**MAGIC: Further Considerations** -Articulation: Ticks and buts -Generality -Interestingness -Credibility -MAGIC considered in totality **No Class (November 28)** **LAB 3 Due (December 1, 11:59 PM)**	None

Final Exam (December 7-21)