Advanced Statistical Inference (PSYC 301)

Required Text:

Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics* (5th Edition). Thousand Oaks, CA: Sage Publications.

Required Statistical Software (SPSS):

Statistical analyses in the course will be conducted using SPSS. SPSS is available to all Queen's students by logging into the Queen's Software Center. On this site, students can access SPSS 28 and the License Key. Students can go directly to the SPSS's info/download website with this direct link (NetID login 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 to Turnitin. In doing so, students' work will 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)-

that is similar to content found on the internet or the Turnitin extensive database of content. Turnitin does

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.

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

All components of this course will receive numerical percentage marks. The final grade you receive for the course will be derived by conve(v)10ETQq0 0 612 792 reW*nBT0 Tw 72.024 Qq 10*n

Queen's Oﬃcial Grade Conversion Scale

A+	90-100
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
C+	67-69
C	63-66
C-	60-62
D+	57-59
D	53-56
D-	50-52
F	49 and below

Queen's Policy Statement on Academic Integrity

Queen's University is dedicated to creating a scholarly community free to explore a range of ideas, to build and advance knowledge, and to share the ideas and knowledge that emerge from a range of intellectual pursuits. Queen's students, faculty, administrators and staff therefore all have responsibilities for supporting and upholding the fundamental values of academic integrity. Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect and responsibility and by the quality of courage. These values and qualities are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University.

The following statements from "The Fundamental Values of Academic Integrity" (2nd edition), developed by the International Center for Academic Integrity (ICAI), contextualize these values and qualities:
1. Honesty   Academic communities of integrity advance the quest for truth and knowledge through intellectual and personal honesty in learning, teaching, research, and service.
2. Trust   Academic communities of integrity both foster and rely upon climates of mutual trust. Climates of trust encourage and support the free exchange of ideas which in turn allows scholarly inquiry to reach its fullest potential.
3. Fairness   Academic communities of integrity establish clear and transparent expectations, standards, and practices to support fairness in the interactions of

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

Course Outline

Dates	Topic	Readings

	-The Pearson correlation coefficient -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. 21, 23)

**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
No Class (November 23)