

PSYC 302: Advanced Research Methods
Winter 2024
SEE onQ FOR LOCATION AND CONTACT INFORMATION

Required Software: SPSS 29 (free from Queen's ITS)

Recommended Texts:

Field, A., (2018). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). California: Sage Publications. YOU ALREADY HAVE THIS FOR PSYC301

Howitt, D., & Cramer, D., (2017). *Introduction to SPSS in Psychology* (7th ed.). United Kingdom: Pearson Education.

Abelson, R. P. (1995). *Statistics as Principled Argument*. Hillsdale, NJ: Laurence Earlbaum.

Pinker, S. (2014). *The Sense of Style: The Thinking Person's Guide to Writing in the 21st Century*. New York: Penguin

Tabachnick, B. G. & Fidell, L. S. (2012). *Using Multivariate Statistics*. New York: Pearson

******See also Excel file on onQ with list of free textbooks**

Course Description.

The primary purpose of this course is to prepare you to do an undergraduate thesis in PSYC501. That is, this course will give you both structure and self-directed opportunities to become an *independent researcher*. To do this, you will need to know how to write a proposal, one of the most important forms of scientific communication. To know how to write a proposal, you will need to know how to connect theory with research questions with hypotheses with study design and measures with statistical tests. Statistically, we will cover the **concepts, procedures, and interpretations** of several multivariate methods. Ultimately, all material and experiences will **provide the resources you will need next year** to successfully conduct your thesis project.

Learning Objectives

By the end of the course, you will be able to:

1. Comprehend the basics of multivariate statistical methods
2. Utilize statistical resources to understand variations and extensions of these methods
3. Conceptually link research questions to appropriate methods
4. Write a coherent research proposal

and going over any aspect of the pre-recorded lecture for that day. It will not be a repeat lecture.

A note on the flipped classroom approach. The data are pretty clear about 2 things: (1) that flipped classrooms result in better learning outcomes for students, and (2) students report not liking it as much as a traditional in-person lecture approach. With topics like stat

rubric will be applied, though with point values increased (5 points for each of 4 criteria), and another peer review will be required within one week.

Final Proposal (40 points) will be a 5-page, double-spaced proposal on yet **another completely new topic (not same as Proposal 1 or 2)** using multivariate statistics (i.e., the stuff we have covered in PSYC302). The final proposal will be graded by same rubric but more points per section. No peer review.

Grading Points

Lab Quizzes (best 8 out of 10) =	40	20%
Proposal 1 =	10*	5%
Proposal 2 =	20*	10%
Final Proposal =	40	20%
Homework 1 =	20	10%
Homework 2 =	30	15%
Homework 3 =	<u>40</u>	<u>20%</u>
Total =	200 points	100%

***Note: ZERO points if you do not submit peer feedback.
All due dates are 5pm Eastern Time Zone.**

GRADING METHOD All components of this course will receive numerical points/percentage marks. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade according to Queen's Official Grade Conversion Scale:

Grade	Numerical Course Average (Range)
A+	85-89
A	80-84
A-	75-79
B+	70-74
B	65-69
B-	60-64
C+	55-59
C	50-54
C-	45-49
D+	40-44
D	35-39
D-	30-34
F	20-29
F	10-19
F	0-9

Electronic Considerations.

All course materials will be distributed through onQ. Please log in before January 12 to make sure that you have no problems with access.

We will be using SPSS for all analyses in this course. Currently, Queen's supports version 29. Downloading this version for yourself is required for the course and will be necessary for the first lab meeting.

EMAIL

If your question is about course content, then

development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

Plagiarism: Because this course requires the submission of original writing assignments, each student is responsible to know and understand what plagiarism is and how to avoid it. Regardless of how and where you retrieve information, the principles of academic integrity apply. Please visit these helpful websites to help you make sure that you are able to write things in your own words: <https://www.library.queensu.ca/academic-integrity>

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:

Instructor/Coordinator name: Tara Karasewich

Instructor/Coordinator email address: psyc.accom@queensu.ca

Students are encouraged to submit requests as soon as the need becomes apparent and to contact their Professors/Course Coordinators as soon as possible once Consideration has been verified. Any delay in contact may limit the Consideration options available.

Please follow up by emailing the instructor within 2 days of receiving verification of your Consideration request.

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 our [website](#).

Course Schedule

week	Date	Topic	Comments & Due Dates
1	T Jan. 9	Orientation	
	F Jan 12	*501 INFO SESSION*	
		<i>No labs</i>	
2	T Jan. 16	The Basics & Overview	
	F Jan. 19	Data Management	
		<i>Lab 1: Orientation & Basics</i>	
	T Jan. 23	Data Reduction I	
3	F Jan. 26	Data Reduction II	
		<i>Lab 2: Messy Data</i>	
	T Jan 30	The Art of the Proposal I	
4	F Feb 2		