PSYC 302: Advanced Research Methods
Queen's University - Winter 2021
Miller 105
Lectures: Tuesdays 11:30am – 1:00pm; Fridays 1:00 - 2:30pm

Instructor : Dr. Tom Hollenstein (tom.hollenstein@queensu.ca)
Head TA: Tina Mihajlovic valentina.mihajlovic@queensu.ca
        Assistant TA: Colleen Pearce(csp6@queensu.ca)

Lab Sections
Tuesday 2:30-5:30pm Lab section 002: Krista Jones: kmj7@queensu.ca
Wednesday6:30pm-9:30pm lab section 005: Megan Wylie: megan.wylie@queensu.ca
Thursday 2:30-5:30pm lab section 004: Devin Fowlie: devin.fowlie@queensu.ca
Friday 2:30-5:30pm Lab section 003: Tina Mihajlovic valentina.mihajlovic@queens u.ca

Required Software: SPSS28 (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 toWriting in the 21 st
        Century . New York: Penguin
Tabachnick, B. G. & Fidell, L. S. (2012). Using Multivariate Statistics   . New York:
        Pearson

****See also E xcel 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.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 withstatistical tests. Statistically, we will cover the
concepts, **procedures**, and **interpretations**of several multivariate methods.

Learning Objectives
By the end of the course you will be able to:
1. Comprehend the basicsof multivaria te 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

Electronic Considerations.

        All course materials will be distributed through onQ . Please log in before January 13 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 28. 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 please use the onQ forum so that other students can see the answers and join the discussion. If you have a question or problem that is specific to only you, please email your lab TA or lecture TA first .

Turnitin

Queen's University has partnered with the third -party application Turnitin to help maintain our standar ds of excellence in academic integrity. Turnitin is a suite of tools that provide instructors with information about the authenticity of submitted work and facilitates the process of grading. Submitted files are compared against an extensive database of content, and Turnitin produces a similarity report and a similarity score fo r each assignment. A similarity score is the percentage of a document that is similar to content held within the database. Turnitin does not determine if an instance of plagiarism has occurred. Instead, it gives instructors the information they need to determine the authenticity of work as a part of a larger process. There is information on the course onQ site about Turnitin policies. See also privacy statement at: http://turnitin.com/en_us/about   -us/ privacy

Academic Integrity

Queen's students, faculty, administrators and staff all have responsibilities for upholdin g the fundamental values of academic integrity; honesty, trust, fairn ess, respect, responsibility and courage (see www.academicintegrity.org). These values are central to the building, nurturing and sustain ing of an academic community in which all members of the community wi ll thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exc hange of ideas" essential to the intellectual life of the University (see the Senate Report on Principles and Priorities http://www.queensu.ca/secretariat/pol icies/senate/report -principles -and-priorities).

Students are responsible for familiarizing themselves with the regulatio ns concerning academic integrity and for ensuring that their assignments and their behaviour conform to the principles of academic int

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.

<u>Plagiarism</u>: 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.queensu.ca/academicin tegrity/students/avoiding - plagiarismcheating
- https://integrity.mit.edu/handbook/academic -writin g/avoiding- plagiarism - paraphrasing
- http://whand0( )T1 0 12 92.C-4(p)6.1(w)-64 Tc 061.5Tw 25.18 rn--9.1(c)1n/(oi)H(s)-2(t)9(ab-1.9

https://www.queensu. ca/secretariat/sites/webpublish.queensu.ca.uslcwww/files/files/ policies/se

Course Schedule

week	Date	Topic	Comments & Due Dates
1	T Jan. 10	Orientation	
	F Jan 13	The Basics & Overview	
		Lab 1: Orientation & Basics	Lab week starts Friday 13th
2	T Jan. 17	***501 INFO SESSION***	
	F Jan. 20	Data Management	
		Lab 2: Messy Data	
3	T Jan. 24	Data Reduction I	
	F Jan. 27	Data Reduction II	
		Lab 3: Data Reduction	
4	T Jan 31	The Art of the Proposal I	
	F Feb 3	GLM intro	Feb 3: Proposal critique
		Lab 4: PCA/Factoring	
5	T Feb. 7	ANCOVA	
	F Feb. 10	MANOVA	
		Lab 5 ANCOVA & GLM	
6	T Feb. 14	MANOVA	
	F Feb. 17	**NO CLASS**	Feb 17. Homework 1
			No Friday lab
7	Feb 20-24	**READING WEEK**	
8	T Feb 28	The Art of the Proposal II	
	F Mar. 3	Repeated Measures	
		Lab 6: MANOVA	Lab week starts Tuesday
9	T Mar. 7	Mixed Models	
	F Mar. 10	Multiple Regression	Mar. 10: 1-page Proposal
		Lab 7: Repeated-measures	
10	T Mar. 14	Multiple Regression	
	F Mar. 17	Multiple Regression	Mar. 17: Peer Feedback
		Lab 8: Multiple Regression	
11	T Mar.21	The Art of the Proposal III	
	F Mar. 24	PROCESS macro	Mar. 24: Homework 2
		Lab 9: Moderation	
12	T Mar. 28	Logistic Regression	
	F Mar. 31	Multilevel Modeling	
		Lab 10	