

PSYC 302: Advanced Research Methods
Queen's University - Winter 2019
Wednesday 10:00 ±11:20 Botterell B143
Friday 8:30 ±9:50 Botterell B143

Instructor: Dr. Tom Hollenstein (tom.hollenstein@queensu.ca) Craine 220
Coordinator TA Kalee De France (k1kd22@queensu.ca)
Head Lab TA: Simone Cunningham (oscc6@queensu.ca)

Lab Sections (Humphrey 219)

Monday 8:30-11:30am Lab section 005 Tina Mihajlovic (valentina.mihajlovic@queensu.ca)
Tuesday 8:30-11:30am lab section 002 Abi Muere (abigail.muere@queensu.ca)
Tuesday 11:30am-2:30pm lab section 003 Abi Muere (abigail.muere@queensu.ca)
Tuesday 2:30-5:30pm Lab section 004 Kalee De France (k1kd22@queensu.ca)

Required Software: SPSS 24

Required Text:

Field, A., (2018). Discovering Statistics Using IBM SPSS Statistics (5th ed.). California: Sage Publications.
Howitt, D., & Cramer, D., (2017) Introduction to SPSS in Psychology (7th ed.). United Kingdom: Pearson Education.

Recommended Texts:

Abelson, R. P. (1995). Statistics as Principled Argument. Hillsdale, NJ: Laurence Earlbaum.
Pinker, S. (2014). The Sense of Style. New York: Penguin

Great Resource:

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

Course Description

The primary purpose of this course is to prepare you to do an undergraduate thesis project 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 with statistical tests. Statistically, we will cover concepts, procedures, and interpretations of several multivariate methods.

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

Course Schedule

week	Day	Date	Topic	Reading	Due
1	W	Jan.9	Orientation		
	F	Jan. 11	The Basics & Overview	Field 1-3	
		Lab 1	Orientation		
2	W	Jan. 16	The Art of the Proposal I		
	F	Jan. 18	Data Management	Field 5-6	
		Lab 2	SPSS Basic	H&C Parts 1 & 6; Field 4	Quiz 1
3	W	Jan. 23	Data Reduction I	Field 601-609	Proposal 1
	F	Jan. 25	Data Reduction II	Field 569-601	
		Lab 3	MessyData	H&C Part 2	Quiz 2
4	W	Jan. 30	Data Reduction III	Field 569-601	Peer feedback
	F	Feb. 1	The Art of the Proposal II		
		Lab 4	Data Reduction	H&C Ch. 27-28	Quiz 3
5	W	Feb. 6	GLM and CCintro	Field 12	
	F	Feb. 8	ANCOVA	Field 13-14	
		Lab 5	Factor Analysis	H&C Ch. 27-28	Quiz 4
6	W	Feb. 13	Considering a thesis? 501 inf		HW 1
	F	Feb. 15	MANOVA	Field 17	
		Lab 6	ANCOVA & GLM	H&C Ch. 24	Quiz 5
7	FEBRUARY 20 -24 READING WEEK NO CLASSES				
8	W	Feb. 27	MANOVA and DFA	Field 17	
	F	Mar. 1	Repeated Measures	Field 15	Proposal 2
		Lab 7	MANOVA	H&C Ch 25	Quiz 6
9	W	Mar. 6	Mixed Models	Field 16	
	F	Mar. 8	Multiple Regression	Field 9	Peer Feedback
		Lab 8	DFA		Quiz 7
10	W	Mar. 13	The Art of the Proposal		

GRADING METHOD All components of this course will receive numerical percentage marks. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade. The following table shows the conversion:

Percentage	Letter Grade	Quality Points
90-100	A	4
80-89	B	3
70-79	C	2
60-69	D	1
50-59	F	0
0-49	W	0

Turnitin

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 for each assignment. A similarity score is the percent 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. See also privacy statement at:

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Top Hat

We will be using the Top Hat (www.tophat.com) classroom response system in class. You will be able to submit answers to class questions using Apple or Android smartphones and tablets, laptops, or through text message. You can visit the Top Hat Overview (<https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide>) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system.

An email invitation was sent to you. To register, simply visit our course website at <https://app.tophat.com/e/841114>

Note: our Course Join Code is 841114

Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email (support@tophat.com), the in app support button, or by calling 888-663-5491.

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