PSYC 302: Advanced Research Methods Queen's University - Winter 2019 Wednesday 0:00 ±11:20Botterell B143 Friday 8:30 ±9:50 Botterell B143

Instructor: Dr. Tom Hollenstein@m.hollenstein@queensu)@raine 220

Coordinator TA Kalee De Franc<u>é11kd22@queensu.</u>ca Head Lab TA: Simone Cunninghatosc6@queensu.ca

## Lab Sections (Humphrey 219)

Monday 8:30-11:30am Lab section 005 ma Mihajlovic (valentina.mihajlovic@queensu)ca

Tuesday 8:30-11:30am lab section OAD Muere abigail.muere@queensu)ca

Tuesday 11:30ar2:30pm lab section 003bi Muere (abigail.muere@gueensu)ca

Tuesday 2:30-5:30pm Lab section 06% lee De Francé 1kd22@queensu.ca

## Required Softwar. SPSS 24

#### Required Tet:

Field, A., (2018. Discovering Statistics Using IBM SPSS Statistics.). California: Sage Publications.

Howitt, D., & Cramer, D., (2017)ntroduction to SPSS in Psychology ed.). United Kingdom: Pearson Education.

### **Recommended Texts:**

Abelson, R. P. (1995)Statistics as Principled Argumentillsdale, NJ: Laurence Earlbaum.

Pinker, S. (2014)The Sense of Style 7 K H 7 K L Q N L Q J 3 H U V R Q ♥ V \* X L G H W I Century New York: Penguin

### Great Resource:

Tabachnick, B. G. & Fidell, L. S. (20)1.2 Jsing 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 covec@theeptsprocedurespand interpretations of several multivariate methods.

### Learning Objectives

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

- 1. Comprehed the basics f 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

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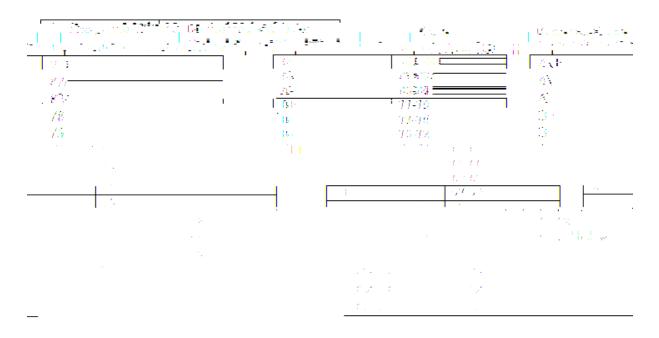
# Course Schedule

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week	Day	Date	Topic	Reading	Due	
W		Jan.9	Orientation			
1	F	Jan. 11	The Basics & Overview	Field 1-3		
		Lab 1	Orientation			
	W	Jan. 16	The Art of the Proposal I			
2	L	Jan. 18	Data Management	Field 5-6		
		Lab 2	SPSS Basic		Quiz 1	
	10/	1	Data Da Ladia d	6; Field 4	D	
•	W	Jan. 23	Data Reduction I	Field 601609	Proposal 1	
3	F	Jan. 25	Data Reduction II	Field 569601		
		Lab3	MessyData	H&C Part 2	Quiz 2	
	W	Jan. 30	Data Reduction III	Field 569601	Peer feedback	
4	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		
	L	Feb. 8	ANCOVA	Field 1314		
		Lab 5	Factor Analysis	H&C Ch. 27-28	Quiz 4	
	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		FEB	RUARY 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 Feedbacl	
		Lab 8	DFA		Quiz 7	

W Mar. 13 The Art of the Proposal

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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 DOHWWHUJUDGHDFRUGLQJrshoRSealeHHQ¶V2IILFLDO\*UDGH&F



#### **Turnitin**

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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 todhass questions using Apple or Andreidartphones and tablets, laptops, or through text message. You can visit the Top Hat Overview (https://success.tophat.com/s/article/Studleng-Hat-Overview-and-Getting-StartedGuide) within the Top Hat Success Center which outlines how you will register Top Hat account, as well as providing a brief overview to get you up and running on the system.

An email invitationwas V H Q W W R \ R X E \ H P D L O E X W L I G R Q ¶ W U H F H L \ simply visiting our course websitettps://app.tophat.com/e/841114

Note: our Course Join Code841114

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

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