PSYC*3290, Course Outline: Winter 2023

Version 1.0

General Information

DUE to the ongoing COVID-19 pandemic some courses are being offered virtually and some face to face. This course is offered using a combination of the Alternate-Delivery-Synchronous (AD-S) format and Face-to-Face format. Lectures are delivered virtually at assigned days and times, and labs take place face to face at an assigned location on campus at the set day and time.

Course Description:

This course focuses on training students in the quantitative analysis and communications skills needed to become a researcher in psychology. Traditional psychological analysis techniques (e.g., t-test, analysis of variance, and bivariate/multiple regression) are taught. The value of interpreting results using effect sizes with confidence intervals is discussed and the logic of null-hypothesis testing is reviewed.

Credit Weight: 0.50

Academic Department (or campus): Psychology

Semester Offering: W23

Blended Class Schedule and Location: Lectures: Zoom, Labs: MCKN 028

Instructor Information

Instructor Name: David J. Stanley, PhD Instructor Email: psyc3290@gmail.com

Office location and office hours: Zoom see Courselink for details

GTA Information

	1			
Lab	Lab	TA	TA Zoom	Email
	Location		Office Hour	
LAB #1: T: 8:30-10:20	MCKN 028	Michelle	Monday, 5:00	mdollois@uoguelph.ca
LAB #2: M: 2:30-4:20	MCKN 028	Michelle	Friday, 4:00	mdollois@uoguelph.ca
LAB #3: T: 11:30-1:20	MCKN 028	Skylar	Monday, 4:00	slaursen@uoguelph.ca
LAB #4: F: 2:30-4:20	MCKN 028	Sebastian	Wednesday, 5:00	ssciarra@uoguelph.ca
LAB #5: Th: 11:30-1:20	MCKN 028	Sebastian	Wednesday, 4:00	ssciarra@uoguelph.ca
LAB #6: F: 8:30-10:20	MCKN 028	Rahul	Thursday, 6:00	rpatel40@uoguelph.ca
LAB #7: F: 11:30-1:20	MCKN 028	Diogo	Wednesday, 5:00	dborba@uoguelph.ca

TA emails are provided only for administrative emails relating to extensions and similar administrative issues. As per their contracts, TAs will only answer content and grading related questions during the labs and office hours. You may only attend the lab you are scheduled for in WebAdvisor. Zoom link posted on Courselink.

Labs typically take place in MCKN 028 with an in-person format.

HOWEVER, if you feel uncomfortable attending an in-person lab, or are sick, we encourage you to attend the virtual labs. ANYONE can attend the virtual Zoom lab regardless of you section. Zoom labs do not occur every week – but they do occur most weeks.

Virtual labs:

January 9 Monday, 12:30pm, LAB Zoom link, Intro to R, Rahul
January 16 Monday, 12:30pm, LAB Zoom link, Intro to Tidyverse, Michelle
January 23 Monday, 12:30pm, LAB Zoom link, Graphing, Skylar
Feb 6 Monday, 12:30pm, LAB Zoom link, t-test (Minor assignment), Diogo
Feb 13 Monday, 12:30pm, LAB Zoom link, one-way (Major assignment), Michelle
March 6 Monday, 12:30pm, LAB Zoom link, split-plot (Major assignment), Sebastian
March 20 Monday, 12:30pm, LAB Zoom link, multiple regression (Major assignment), Sebastian

The weeks Major lab assignments are due there will be additional office hours as illustrated below.

Lab	TA	Major Lab ONLY
		Extra Zoom Hour
LAB #1: T: 8:30-10:20	Michelle	ТВА
LAB #2: M: 2:30-4:20	Michelle	TBA
LAB #3: T: 11:30-1:20	Skylar	TBA
LAB #4: F: 2:30-4:20	Sebastian	TBA
LAB #5: Th: 11:30-1:20	Sebastian	TBA
LAB #6: F: 8:30-10:20	Rahul	TBA
LAB #7: F: 11:30-1:20	Diogo	TBA

Course Content

Specific Learning Outcomes:

- **2 Literacy, Facet 2. Methodological Literacy:** The ability to understand, evaluate, and design appropriate methodologies for rigorous psychological science
- **2 Literacy, Facet 3. Quantitative Literacy:** Includes numeracy, and competence in working with numerical data
- 2 Literacy, Facet 4 Technological Literacy: The ability to select and use appropriate technology
- **2 Literacy, Facet 5 Visual Literacy:** The ability to effectively find, interpret, evaluate, use, and create images and visual media and content.
- **4 Communicating, Facet 2 Written Communication:** The ability to express one's ideas and summarize theory and research through a variety of writing styles (e.g., American Psychological Association [APA] style, term papers, posters

Lecture Content:

Lectures are **asynchronous**. Lecture content will be presented as a combination of notes on the class website (bit.ly/psyc3290) and videos/slides on Courselink. Please attend office hours to get help with lecture material.

Labs:

Labs are in person when possible and **synchronous via Zoom otherwise** – only attend the lab in your WebAdvisor schedule.

Course Assignments and Tests:

Week	Lecture	Reading	Lab	DUE
1	Introduction	Class website: Populations	Intro to R	
Jan 9		Class website: Sample Accuracy	Class website:	
			Chapter 1	
2	d-values	Class website: Sample Precision	Tidyverse	
Jan 16		Chapter 4 Normal Distribution	Class website:	
			Chapter 2	
3	p-values and	Article: p-values:	Graphing	
Jan 23	confidence intervals	Chapter 5 Confidence Intervals	Class website: Chapter 3	
4	t-test between	Chapter 7: Independent Groups	Lab Midterm	
Jan 3-		Design		
5	One-way	Chapter 14: Extended Designs One	t-test	
Feb 6	ANOVA	Independent Variable	MINOR 1	
6	CRF ANOVA	Chapter 15: Extended Designs Two	One-way	t-test
Feb 13		Independent Variables	MAJOR 1	Before lab starts
7	Split-plot ANOVA	Chapter 15: Extended Designs Two	CRF	One-way
Feb 27		Independent Variables	MINOR 2	Before lab starts
8	Correlation/regression	Chapter 11: Correlation	Split-plot	CRF
Mar 6			MAJOR 2	Before lab starts
9	Multiple	Chapter 12: Regression	Correlation	Split-plot
Mar 13	Regression		Regression MINOR 3	Before lab starts
10	Proportions	Chapter 13: Proportions	Multiple	Correlation/Reg
Mar 20			Regression MAJOR 3	Before lab starts
11			Proportions	M. Regression
Mar 27	Advanced R for statistics	None.	MINOR 4	Before lab starts
12		Q&A for final exam		Proportion
April 3				Before lab starts

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Course Outline Quiz	Week 1 anytime	2.5	
Midterm: Lab	In lab during the 4 th week (see above table)	10	2 Literacy (Facets, 2,3, 4, 5) 4 Communicating (Facet 2)
Minor: t-test	In lab, week of Feb 13	2.5	2 Literacy (Facets, 2,3, 4, 5) 4 Communicating (Facet 2)
Minor: CRF	In lab, week of Mar 6	2.5	2 Literacy (Facets, 2,3, 4, 5) 4 Communicating (Facet 2)
Minor: Correlation	In lab, week of Mar 20	2.5	2 Literacy (Facets, 2,3, 4, 5) 4 Communicating (Facet 2)
Minor: Proportions	In lab, week of Apr 3	2.5	2 Literacy (Facets, 2,3, 4, 5) 4 Communicating (Facet 2)
Major: One-way	In lab, week of Feb 27	15	2 Literacy (Facets, 2,3, 4, 5) 4 Communicating (Facet 2)
Major: Split-plot	In lab, week of Mar 13	15	2 Literacy (Facets, 2,3, 4, 5) 4 Communicating (Facet 2)
Major: Regression	In lab, week of Mar 27	15	2 Literacy (Facets, 2,3, 4, 5) 4 Communicating (Facet 2)

In this course we use a universal accommodation approach – that does not require medical documentation or instructor consent. If you are unable to write the lab midterm to acute medical, academic, or personal reasons, its contribution to their final grade will be automatically shifted to the final exam.

Due to the nature of the lab midterm, if you cannot write the lab midterm at the scheduled time the marks will be automatically moved to the final exam (it cannot be rescheduled).

If you have extenuating circumstances (medical/personal) such that you require an extension on a major assignment – contact your TA via email.

Final examination (online) date and time: See WebAdvisor. Exam is online via Courselink. Final exam weighting: 35

Examination Regulations

Course Resources

Required Texts:

Cumming, G., & Calin-Jageman, R. (2016). Introduction to the new statistics: Estimation, open science, and beyond. Routledge. [3 digital copies available on library website].

Other Resources:

American Psychological Association. (2019). *American Psychology Association Publication Manual 7th Edition*. Washington, DC: American Psychological Association.

APA 7 paper-book link

APA 7 e-book link

Courselink: Course materials available on CourseLink.

Course website: Course materials at bit.ly/psyc3290.

Software: We will use the free software below for our analyses: <u>RStudio Cloud</u>. Be sure to sign up with your university email. You will receive a invitation or link to the classwork space. This access will last for the duration of the course.

DO NOT share this the RStudio invitation/workspace link outside of the class. The service is very expensive, and we have a limited number or RStudio Cloud slots (paid for in advance). If you share the link with someone outside of the class, you will be giving the RStudio slot for one of your classmates to someone else.

This service allows the instructor/TA to look in on your project and check to see why your code may not be running during the lab/office hours. Note that when a TA/instructor access your code – you are "kicked out" of your own project. Two people can't look at a project at the same time.

Course Policies

Course Concerns

Any concerns about the course or course administration should be brought up during office hours – not sent via email. Email is prone to misunderstanding and consequently not an appropriate venue for expressing course concerns. I am happy to discuss any concerns you may have about the course during office

Grading Policies

All assignments are due at the beginning of your lab in order to be considered "on time". Major assignments have a late penalty of 20% per day. If you have extenuating circumstances (medical/personal) such that you require an extension on a major assignment – **contact your TA via email.**

Minor assignments that are late are not accepted and receive a grade of zero. You obtain the grade for the best 3 of 4 minor assignments as a form of universal accommodation. This is not designed to maximize your grade but rather consider medical or personal complications for students.

In this course we use a universal accommodation approach – that does not require medical documentation or instructor consent. If you are unable to write the midterm lab/lecture to acute medical, academic, or personal reasons, its contribution to their final grade will be automatically shifted to the final exam.

Due to the nature of the lab midterm, if you cannot write the lab midterm at the scheduled time the marks will be automatically moved to the final exam (it cannot be rescheduled).

Undergraduate Grading Procedures

Course Policy on Group Work:

You may work with other students to understand the material, but minor and major lab assignments should be written individually without the assistance of others. Likewise, the midterm and final exam should be written individually without the assistance of others.

Course Policy regarding use of electronic devices and recording of lectures:

Electronic recording of classes by students is expressly forbidden without consent of the instructor. When recordings are permitted, they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor. Lectures may occasionally be recorded for the purpose of documenting teaching practices. If you do not want to appear in this teaching documentation please inform the instructor via email.

Student Rights and Responsibilities when Learning Online

Online behaviour

According to the University Secretariat, students have a responsibility to help support community members' access to the tools they need to engage in their learning and development, both in and outside of the classroom. An example of this type of responsibility is the requirement to abide by the following:

Section 4.3.3. Disruption - to not interfere with the normal functioning of the University, nor to intimidate, interfere with, threaten or otherwise obstruct any activity organized by the University, including classes, or to hinder other members of the University community from being able to carry on their legitimate activities, including their ability to speak or associate with others.

As such, appropriate online behaviour will not be tolerated. Examples of inappropriate online behaviour include

- Posting inflammatory messages about your instructor or fellow students
- Using obscene or offensive language online
- Copying or presenting someone else's work as your own
- Adapting information from the Internet without using proper citations or references
- Buying or selling term papers or assignments
- Posting or selling course materials to course notes websites
- Having someone else complete your quiz or completing a quiz for/with another student
- Stating false claims about lost quiz answers or other assignment submissions
- Threatening or harassing a student or instructor online
- Discriminating against fellow students, instructors and/or TAs
- Using the course website to promote profit-driven products or services
- Attempting to compromise the security or functionality of the learning management system
- Sharing your username and password

University Policies

Disclaimer:

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email. This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website (https://news.uoguelph.ca/2019-novel-coronavirus-information/) and circulated by email.

Email communications

Ontario legislation on the right to disconnect from work requires employers to create a written policy. Correspondingly, University of Guelph has developed a written <u>Disconnecting from Work Policy</u> and a corresponding <u>FAQ</u>. Following from this policy, email responses to student

questions will only be sent during business hours Monday to Friday. The instructor will endeavor to respond to student questions within 2 **business** days.

Academic Consideration

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for

Academic Consideration:

Academic Consideration, Appeals and Petitions

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar: Academic Misconduct Policy

Illness

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment.

Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact <u>Student Accessibility Services</u> as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 54335 or email accessibility@uoguelph.ca or the Student Accessibility Services Website

Student Feedback Questionnaire

These questionnaires (formerly course evaluations) will be available to students during the last 2 weeks of the semester. Students will receive an email directly from the Student Feedback Administration system which will include a direct link to the questionnaire for this course. During this time, when a student goes to login to Courselink, a reminder will pop-up when a task is available to complete.

Student Feedback Questionnaire

Drop date

For regulations and procedures for Dropping Courses, see the <u>Schedule of Dates in the</u> Academic Calendar. Schedule of Dates in the Academic Calendar.

Instructors must provide meaningful and constructive feedback, at minimum 20% of the final course grade, prior to the 40th class day. For courses which are of shorter duration, 20% of the final grade must be provided two-thirds of the way through the course.