

PSYC*6060, Course Outline: Fall 2024

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 the Alternative-Delivery-Synchronous (AD-S) format. There is an assigned day and time for class lectures, but no classroom, because lectures are delivered via Zoom.

Course Title: Research Design and Statistics

Course Description:

This course examines the current context for psychological research and discusses associated problems and consequences. You will learn how to plan, preregister, and conduct research using statistical tests such as: t-test, one-way ANOVA, N-way ANOVA, between/within ANOVA, and multiple regression. A key learning goal is establishing a research workflow that reduces the probability of errors.

Credit Weight: 0.50

Academic Department (or campus): Psychology

Semester Offering: F24

Class Schedule and Location: 8:30 Tuesday on Zoom, Labs 2:30pm Thursday

Instructor Information

Instructor Name: David J. Stanley
Instructor Email: psyc6060@gmail.com
Office location and office hours: TBA

GTA Information

GTA Name: Niyatee Narker
GTA Email: nnarkar@uoguelph.ca
GTA office location and office hours: TBA

Course Content

Specific Learning Outcomes:

1. 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
3. Literacy. Facet 4. Technological literacy: the ability to select and use appropriate technology
4. Communication. Facet 3. Reading comprehension: the understanding of theoretical and empirical literature in Psychology.

Lecture Content:

The course is broken down into four sections:

- 1) Open Science and basic statistics
- 2) Understanding power, sample size planning, etc.
- 3) ANOVA-based analyses
- 4) Regression based analyses (time permitting)

Labs:

Labs occur each Thursday 2:30pm. They focus on using R to conduct statistical analyses.

Course Assignments and Tests:

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Midterm 1	October 1	30	1 to 4
Midterm 2	November 5	30	1 to 4

Additional Notes (if required):

If a midterm is missed the grades are automatically added to the final exam.

Final examination date and time: December 10th, 8:30am (online)

Final exam weighting: 40% (Cummulative exam)

[Examination Regulations](#)

Course Resources

Required Texts:

Pennington, C. (2023). EBOOK; A Student's Guide to Open Science: Using the Replication Crisis Reform Psychology. McGraw-Hill Education (UK).

Available from the [University Bookstore](#) and other resellers (Kindle, etc.).

Other Resources:

A key aspect of the course is using www.datacamp.com to learn R and RStudio.

You sign up for this service using the link emailed to you from datacamp.com.

Your university email must be used to sign up for this service.

Units covered are indicated in the GROUPS then ASSIGNMENT section on datacamp.com

Course Policies

Grading Policies

[Graduate Grade interpretation](#)

Course Policy on Group Work:

All work must be completed on an individual basis.

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

Electronic recording of classes is expressly forbidden without the written 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. Portion of the some lectures may be recorded for the purpose of documenting teaching practices for the Chair's/Dean's offices.

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.

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:

[Grounds for Academic Consideration](#)

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 [Graduate Calendar](#):

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 [Student Accessibility Services](#) 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

The last date to drop one-semester courses, without academic penalty, is Friday November 29, 2024. For regulations and procedures for Dropping Courses, see the [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.

[Current Graduate Calendar](#)