

Brief Course Outline

Course Title: **Computers and Research in Psychology**

Course Number and Section:

PSYCHOL

3830G 550

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Disclaimer: Information in the brief course outline is subject to change. The syllabus posted on OWL is the official and authoritative source of information for the course.

Course Description:

Topics include: fundamentals of operating microcomputers, use of statistical packages (e.g., SPSS/PC+), interpretation of computer output from univariate and multivariate statistical analyses.

Learning Outcomes:

Determine the appropriate statistical test for various types of data in psychology

Conduct a variety of statistical tests using computer software

Write an APA-style results section reporting the outcomes of common statistical tests

Design and conduct an empirical research study

Textbooks and Course Materials:

The texts are here to support your understanding of the different analyses we will cover with additional information, should you need it. Some people will find them helpful and others less so. Important concepts will be covered in lecture and lab, so I consider these texts secondary to our in-class work.

You will need to download the statistical software packages for the course: SPSS & JASP. SPSS can be bought or accessed for free via MyVlab at UWO. JASP is free to download.

SPSS

The text is available at the university bookstore. If you do not wish to buy the text, it is available at the library as an e-book. This text is highly recommended for anyone who likes a funny stats book (yes, really) and who may be a bit nervous about stats or feel they would like additional background on the analyses we will cover. Also, students who plan to go on to graduate school of any kind are encouraged to own a copy. The text is also available for purchase from online sellers such as amazon.ca and chapters.ca.

- A Field, A. (2024). *Discovering Statistics Using IBM SPSS Statistics*, North American edition (6th ed). Sage: London.

- Text Associated SAGE Edge web site: <https://edge.sagepub.com/field5e/student-resources/resources-by-type>

A license for SPSS software can be purchased to use on your own laptop:

<https://computerstore.uwo.ca/product/spss25lic>

- SPSS can also be accessed for free via MyVLab at UWO, although some students find it slow. Accessing MyVLab takes a little bit of setup on your laptop:

https://myvlab.uwo.ca/setup_instructions/index.html

JASP

The JASP text is available for free at <https://learnstatswithjasp.com/>

- Navarro DJ, Foxcroft DR, Faulkenberry TJ. (2019). Learning statistics with JASP: A tutorial for psychology students and other beginners.

JASP software is free to download at: <https://jasp-stats.org/download/>

Excel

You should also have Microsoft Excel installed from the UWO Microsoft 365 Office package site (free for students): <https://wts.uwo.ca/sitelicense/microsoft/homeuse.html>

APA Publication Manual 7th Edition

You will need to use APA formatting for your lab assignments—you must use the 7th edition.

A copy is available in the library. Limited information is available on the American Psychological Association's website (www.apastyle.org) and Purdue University web site (https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html).

Methods Of Evaluation:

Assignment	Due Date mm/dd/yy	Weight - %
Q01: Correlation & Linear Regression	01/20/2025	6.25% (best 4 of 5)
A01: Multiple Regression	01/27/2025	10%
A02: t-tests	02/03/2025	10%
Q02: One-way ANOVA	02/10/2025	6.25% (best 4 of 5)
A03: Factorial ANOVA	02/24/2025	10%
Q03: Repeated Measures ANOVA	03/03/2025	6.25% (best 4 of 5)
A04: Mixed ANOVA	03/10/2025	10%
Q04: Factor Analysis	03/17/2025	6.25% (best 4 of 5)
Q05: Chi-Square	03/24/2025	6.25% (best 4 of 5)
Final Exam	TBD	35%

In solidarity with the Anishinaabe, Haudenosaunee, Lūnaapéewak, and Chonnonton peoples on whose traditional treaty and unceded territories this course is shared.

Friday, December 13, 2024