Creation date: October 28, 2020
Revision date: June 26, 2025

SAMPLE COURSE OUTLINE

Course Code, Number, and Title:

PSYC 2321: Data Analysis for Psychology

Course Format:
[Course format may vary by instructor. The typical course format would be:]

Face to Face: in Class format: Lecture 4 h
Mixed Mode: Lecture 2h; Online 2h (in BrightSpace)
Fully Online: All Online (in BrightSpace)

Credits: 3.0 **Transfer Credit:** For information, visit bctransferguide.ca

Course Description, Prerequisites, Corequisites:

Statistical analyses are used in psychology to help us understand data so we can evaluate claims and make informed decisions. In this course, students study concepts and methods of behavioural data analysis, including the use of descriptive and inferential statistics to understand psychological research. Students practice conceptual interpretation of data and learn to translate statistics into meaningful ideas to prepare them to read and critically evaluate psychological research.

Prerequisite(s): A minimum "C+" grade in PSYC 1115 and 1215; and one of the following: a minimum "C" grade in Foundations of Mathematics 11, Pre-calculus 11, Foundations of Mathematics 12, or Pre-calculus 12; an "S" grade in MATH 1150; a satisfactory score (code 053) on the Statistics Diagnostic Test (SDT); or a 055 or higher on the Math Diagnostic Test (MDT).

Learning Outcomes:

Upon successful completion of this course, students will be able to…

1. **Distinguish between descriptive and inferential statistics**
2. **Discriminate various distribution shapes and predict the shape of a distribution for a given variable**
3. **Draw the normal distribution and identify its key features**
4. **Distinguish between a distribution of raw scores and a distribution of statistics**
5. **Calculate by hand a variety of statistics commonly used in psychology, such as means, variance, correlation, regression, z-scores, t-tests, and ANOVA.**
6. **Identify the relationships among major statistical concepts (e.g., alpha, confidence intervals, effect size, power, variability, sample size)**
7. **Choose and apply the appropriate statistic to analyze a dataset, when provided with a study design and a researcher's purpose**
8. **Generate a conclusion for a research hypothesis based on the analysis of data**
9. **Recognize the logic underlying the statistical analyses**
10. **Evaluate statistical procedures and conclusions found in a variety of media.**

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Instructor(s): TBA
Office: TBA **Phone: (604) 323-XXXX**
Office Hours: TBA **Email: TBA**

Textbook and Course Materials:
[Textbook selection may vary by instructor. An example of texts and course materials for this course might be:]

For textbook information, visit https://mycampusstore.langara.bc.ca/buy_courselisting.asp?selTerm=3|8

Note: *This course may use an electronic (online) instructional resource that is located outside of Canada for mandatory graded class work. You may be required to enter personal information, such as your name and email address, to log in to this resource. This means that your personal information could be stored on servers located outside of Canada and may be accessed by U.S. authorities, subject to federal laws. Where possible, you may log in with an email pseudonym as long as you provide the pseudonym to me so I can identify you when reviewing your class work.*

Assessments and Weighting:
Final Exam 20%
Other Assessments 80%
[An example of other assessments might be:]

Homework Assignments: 20%
Tutorial Exercises: 20%
Midterm: 20%
Term Paper: 20%

Grading System:
Specific grading schemes will be detailed in each course section outline.

Information unavailable, please consult Department for details.

Topics Covered:
[Topics covered may vary by instructor. An example of topics covered might be:]

- *Introduction to Statistics and Research Design*
- *Displaying Data*
- *Central Tendency, Variability, Sampling, and Probability*

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- *The Normal Curve*
- *Hypothesis Testing with z test*

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- *Confidence Intervals, Effect Size, and Power*
- *Single- and Paired-Sample t Test*
- *Independent-Sample t*
- *ANOVAs*
- *Correlation*
- *Regression*

As a student at Langara, you are responsible for familiarizing yourself and complying with the following policies:

College Policies:

E1003 - Student Code of Conduct
F1004 - Code of Academic Conduct
E2008 - Academic Standing - Academic Probation and Academic Suspension
E2006 - Appeal of Final Grade
F1002 - Concerns about Instruction
E2011 - Withdrawal from Courses

Departmental/Course Policies:

Information unavailable, please consult Department for details.

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