



COURSE OUTLINE		
TERM: Fall 2020	COURSE NO: PSYC 413	
INSTRUCTOR:	COURSE TITLE: Applied Data Analysis in Psychology	
OFFICE: LOCAL: E-MAIL: @capilanou.ca	SECTION NO(S):	CREDITS: 3
OFFICE HOURS:		
COURSE WEBSITE:		

Capilano University acknowledges with respect the Lil'wat, Musqueam, Squamish, Sechelt, and Tsleil-Waututh people on whose territories our campuses are located.

#### **COURSE FORMAT**

Three hours of class time, plus an additional hour delivered through on-line or other activities for a 15-week semester, which includes two weeks for final exams.

#### **COURSE PREREQUISITES**

PSYC 212 and PSYC 213

#### **CALENDAR DESCRIPTION**

This course outlines a variety of quantitative and qualitative data analytic methods used in applied psychological research. Quantitative topics will include the analysis of multiple independent and dependent variables, outlier identification, non-parametric tests, mixed method analysis of variance and covariance, and regression models. Qualitative data analytic techniques including phenomenological analysis, grounded theory, and narrative analysis will also be outlined.

#### **COURSE NOTE**

PSYC 413 is an approved Numeracy course for Cap Core requirements.

PSYC 413 is an approved Quantitative/Analytical course for baccalaureate degrees.

PSYC 413 is a required course for Psychology Honours students.

#### **REQUIRED TEXTS AND/OR RESOURCES**

Field, A. (2017). *Discovering statistics using IBM SPSS Statistics North American Edition* (5<sup>th</sup> ed.). Sage Publications.

Lyons, E., & Coyle, A. (2007). *Analysing qualitative data in psychology*. Sage Publications.

**COURSE STUDENT LEARNING OUTCOMES**

**On successful completion of this course, students will be able to do the following:**

- Describe key concepts, principles, and overarching themes in psychological data analysis
- Develop a working knowledge of content domains in psychological data analysis
- Describe relevant and practical applications of psychological data analytic techniques to everyday life
- Demonstrate information literacy in the area of in psychological data analysis, including use of psychology databases, and identifying objective sources of psychology information
- Engage in innovative and integrative thinking and problem solving
- Demonstrate effective writing in research reports and papers
- Interact effectively with others in group assignments
- Exhibit self-efficacy and self-regulation

**Students who complete this Numeracy course will be able to do the following:**

- Apply both analytical and numerical skills to solve problems.
- Summarize and analyze data in quantitative forms.
- Interpret and draw conclusions from an analysis of quantitative data.
- Represent quantitative information in a variety of forms (e.g. symbolically, visually, numerically, and verbally).
- Incorporate quantitative evidence in support of an argument.

**COURSE CONTENT**

Week	Topics	Readings
1	Introduction to applied data analysis	Field, Chapters 1-3
2	IBM SPSS, Exploring data with graphs, Identifying outliers/normality	Field, Chapters 4-6
3	Non-parametric models	Field, Chapter 7
4	Bivariate and Partial correlations	Field, Chapter 8
5	Linear Model (regression), Moderation, Mediation and Multicategory Predictors	Field, Chapters 9, 11
6	General Linear Model (GLM) part 1: Comparing several independent means	Field, Chapter 12
7	Midterm Exam	
8	GLM part 2: Analysis of covariance, GLM part 3: Factorial designs	Field, Chapters 13-14
9	GLM part 4: Repeated measures design, GLM part 5: Mixed design	Field, Chapters 15-16
10	Introducing Qualitative Data Analysis	Lyons & Coyle, Chapters 1-2, 11
11	Interpretive Phenomenological Analysis	Lyons & Coyle, Chapters 3-4
12	Grounded Theory	Lyons & Coyle, Chapters 5-6

13	Narrative Analysis	Lyons & Coyle, Chapters 9-10
14-15	Final Exam Period	

All assigned chapters are required and will be examined, regardless of whether the material in them is covered in class.

### EVALUATION PROFILE

Lab Assignments	20-40%*
Examinations/Quizzes/Presentations	25-60%*
Final Examination	20-35%
Total	100%

\*Note: No single evaluation component will be worth more than 35%.

### GRADING PROFILE

A+ = 90-100	B+ = 77-79	C+ = 67-69	D = 50-59
A = 85-89	B = 73-76	C = 63-66	F = 0-49
A- = 80-84	B- = 70-72	C- = 60-62	

### Incomplete Grades

Grades of Incomplete "I" are assigned only in exceptional circumstances when a student requests extra time to complete their coursework. Such agreements are made only at the request of the student, who is responsible to determine from the instructor the outstanding requirements of the course.

### Late Assignments

Unless otherwise specified, assignments are due at the beginning of the class or uploaded on the elearn course website on the due date listed. If you anticipate handing in an assignment late, please consult with your instructor beforehand.

### Missed Exams/Quizzes/Labs etc.

Make-up exams, quizzes and/or tests are given at the discretion of the instructor, in medical emergencies or severe personal crises, with prior notice, and appropriate documentation. Some missed labs or other activities may not be able to be accommodated. Please consult with your instructor.

### Attendance

Students are expected to maintain regular class attendance. Students are responsible for all announcements made in class, online to students' my.capilanou.ca email account or course website, and for all material on the course syllabus. Although instructors may discuss only portions of a chapter in class, students are responsible for studying all of each chapter listed in the course syllabus. Appropriate university behaviour is expected (see the University Calendar).

### English Usage

University level writing skills are required in all assignments. American Psychological Association (APA) writing guidelines, including the use of respectful language, must be followed. All assignments must be original and must be used for this course only. Students are expected to proofread all written work for

any grammatical, spelling and stylistic errors. Instructors may deduct marks for incorrect grammar and spelling in written assignments.

### **Electronic Devices**

The use of personal technology is permitted in the classroom for note-taking purposes only, and if it is not distracting to others. During an exam, all personal technology must be turned off and removed from the desk.

### **On-line Communication**

Outside of the classroom, instructors will (if necessary) communicate with students using either their official Capilano University email or eLearn; please check both regularly. Official communication between Capilano University and students is delivered to students' Capilano University email addresses only.

## **UNIVERSITY OPERATIONAL DETAILS**

### **Tools for Success**

Many services are available to support student success for Capilano University students. A central navigation point for all services can be found at: <https://www.capilanou.ca/student-life/>

**Capilano University Security: download the [CapU Mobile Safety App](#)**

### **Policy Statement (S2009-06)**

Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Cheating and Plagiarism, Academic Probation and other educational issues. These and other policies are available on the University website.

### **Academic Integrity (S2017-05)**

Any instance of academic dishonesty or breach of the standards of academic integrity is serious and students will be held accountable for their actions, whether acting alone or in a group. See policy and procedures S2017-05 Academic Integrity for more information: <https://www.capilanou.ca/about-capu/governance/policies/>

Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances, are prohibited and will be handled in accordance with the Student Academic Integrity Procedures.

**Academic dishonesty** is any act that breaches one or more of the principles of academic integrity. Acts of academic dishonesty may include but are not limited to the following types:

**Cheating:** Using or providing unauthorized aids, assistance or materials while preparing or completing assessments, or when completing practical work (in clinical, practicum, or lab settings), including but not limited to the following:

- Copying or attempting to copy the work of another during an assessment;
- Communicating work to another student during an examination;
- Using unauthorized aids, notes, or electronic devices or means during an examination;
- Unauthorized possession of an assessment or answer key; and/or,

- Submitting of a substantially similar assessment by two or more students, except in the case where such submission is specifically authorized by the instructor.

**Fraud:** Creation or use of falsified documents.

**Misuse or misrepresentation of sources:** Presenting source material in such a way as to distort its original purpose or implication(s); misattributing words, ideas, etc. to someone other than the original source; misrepresenting or manipulating research findings or data; and/or suppressing aspects of findings or data in order to present conclusions in a light other than the research, taken as a whole, would support.

**Plagiarism:** Presenting or submitting, as one's own work, the research, words, ideas, artistic imagery, arguments, calculations, illustrations, or diagrams of another person or persons without explicit or accurate citation or credit.

**Self-Plagiarism:** Submitting one's own work for credit in more than one course without the permission of the instructors, or re-submitting work, in whole or in part, for which credit has already been granted without permission of the instructors.

**Prohibited Conduct:** The following are examples of other conduct specifically prohibited:

- Taking unauthorized possession of the work of another student (for example, intercepting and removing such work from a photocopier or printer, or collecting the graded work of another student from a stack of papers);
- Falsifying one's own and/or other students' attendance in a course;
- Impersonating or allowing the impersonation of an individual;
- Modifying a graded assessment then submitting it for re-grading; or,
- Assisting or attempting to assist another person to commit any breach of academic integrity.

### **Sexual Violence and Misconduct**

All Members of the University Community have the right to work, teach and study in an environment that is free from all forms of sexual violence and misconduct. Policy B401 defines sexual assault as follows:

Sexual assault is any form of sexual contact that occurs without ongoing and freely given consent, including the threat of sexual contact without consent. Sexual assault can be committed by a stranger, someone known to the survivor or an intimate partner.

Safety and security at the University are a priority and any form of sexual violence and misconduct will not be tolerated or condoned. The University expects all Students and Members of the University Community to abide by all laws and University policies, including B.401 Sexual Violence and Misconduct Policy and B.401.1 Sexual Violence and Misconduct Procedure (found on Policy page <https://www.capilanou.ca/about-capu/governance/policies/>)

**Emergencies:** Students are expected to familiarise themselves with the emergency policies where appropriate and the emergency procedures posted on the wall of the classroom.