



**Psychology 617                      Advanced Research Design and Analysis II                      Winter 2013**

<b>Instructor:</b>	Tom O’Neill	<b>Lecture Location:</b>	Admin 248
<b>Phone:</b>	403-220-5207	<b>Lecture Days/Time:</b>	R 9:00 – 11:50
<b>Email:</b>	<a href="mailto:toneill@ucalgary.ca">toneill@ucalgary.ca</a>	<b>TA:</b> Aiden Arnold	aarnold@ucalgary.ca
		<b>TA Office:</b>	Admin 065
		<b>Lab Location:</b>	SS 018
<b>Office:</b>	Admin 264	<b>Lab Day/Time:</b>	T 14:00 – 16:50
<b>Office Hours:</b>	By appointment	<b>Office Hours:</b>	By appointment

**Course Description and Goals**

Multivariate techniques and design issues, including correlations, multiple regression, canonical correlation, logistic regression, discriminant analysis, linear mixed models with nested and longitudinal designs (e.g., “hierarchical linear modeling”), exploratory factor analysis, confirmatory factor analysis, path analysis, and structural equation modeling.

**Required Text**

Meyers, L. S., Gamst, G., & Guarino, A. J. (2013). Applied multivariate research: Design and interpretation (2<sup>nd</sup> ed.). Sage. The university bookstore should have copies.

**Evaluation**

1. Mid term exam: 25% (on material covered to February 12<sup>th</sup>)
2. Final exam: 40% (cumulative)
3. Lab assignments: 35% (7 total)

**Grading Scale**

A+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
A	90-95%	B	76-79%	C	63-66%	D	50-53%
A-	85-89%	B-	72-75%	C-	59-62%	F	0-49%

As stated in the University Calendar, it is at the instructor’s discretion to round off either upward or downward to determine a final grade when the average of term work and final examinations is between two letter grades.

To determine final letter grades, final percentage grades will be rounded up or down to the nearest whole percentage (e.g., 89.5% will be rounded up to 90% = A but 89.4% will be rounded down to 89% = A-).

### Important dates

[Winter 2013]

Date	
T Jan 8	Lecture begins.
F Jan 18	Last day to drop a course with tuition refund.
M Jan 21	Last day for registration/change of registration.
Feb 17-24	Reading days. No lecture.
M Feb 18	Alberta Family Day. No lecture.
T Apr 16	Lecture ends.

### Schedule

Date	Topic/Activity/Readings/Due Date (revise and add columns & rows as necessary)
T Jan 8	Lecture begins. NO LAB THIS WEEK
R Jan 10	Course overview and correlation
T Jan 15	<b>Lab:</b> Introduction to SPSS; Correlation (no assignment)
R Jan 17	Multiple Regression
F Jan 18	Last day to drop a course with tuition refund.
M Jan 21	Last day for registration/change of registration.
T Jan 22	<b>Lab:</b> Correlation and Multiple Regression
R Jan 24	Canonical Correlation
T Jan 29	<b>Lab:</b> Canonical Correlation
R Jan 31	Logistic Regression
T Feb 5	<b>Lab:</b> Logistic Regression
R Feb 7	Discriminant Function Analysis
T Feb 12	<b>Lab:</b> Discriminant Function Analysis (no assignment)
R Feb 14	Exam
T Feb 19	Reading days. No lecture.
R Feb 21	Reading days. No lecture.
T Feb 26	Exam feedback
R Feb 28	Multilevel Modeling: Nested Designs
T Mar 5	<b>Lab:</b> Multilevel Modeling: Nested Designs (no assignment)
R Mar 7	Multilevel Modeling: Longitudinal Designs
T Mar 12	<b>Lab:</b> Multilevel Modeling: Nested and Longitudinal Designs
R Mar 14	Exploratory Factor Analysis (EFA)
T Mar 19	<b>Lab:</b> EFA

R Mar 21	Confirmatory Factor Analysis (CFA)
T Mar 26	<b>Lab:</b> CFA
R Mar 28	Path Analysis & Structural Equation Modeling (SEM)
T Apr 2	<b>Lab:</b> SEM
R Apr 4	SEM
T Apr 9	Exam review
R Apr 11	Final exam
T Apr 16	Lecture ends. Last day to withdraw

### **Reappraisal of Grades**

A student who feels that a piece of graded term work (e.g., term paper, essay, test) has been unfairly graded, may have the work re-graded as follows. The student shall discuss the work with the instructor within 15 days of being notified about the mark or of the item's return to the class. If not satisfied, the student shall immediately take the matter to the Head of the department offering the course, who will arrange for a reassessment of the work within the next 15 days. The reappraisal of term work may cause the grade to be raised, lowered, or to remain the same. If the student is not satisfied with the decision and wishes to appeal, the student shall address a letter of appeal to the Dean of the faculty offering the course within 15 days of the unfavourable decision. In the letter, the student must clearly and fully state the decision being appealed, the grounds for appeal, and the remedies being sought, along with any special circumstances that warrant an appeal of the reappraisal. The student should include as much written documentation as possible.

### **Plagiarism and Other Academic Misconduct**

Intellectual honesty is the cornerstone of the development and acquisition of knowledge and requires that the contribution of others be acknowledged. Consequently, plagiarism or cheating on any assignment is regarded as an extremely serious academic offense. Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Students should examine sections of the University Calendar that present a Statement of Intellectual honesty and definitions and penalties associated with Plagiarism/Cheating/Other Academic Misconduct.

### **Academic Accommodation**

It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 403-220-8237. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than 14 days after the start of this course.

### **Absence From A Test/Exam**

Students who miss a term test due to a valid and documented official University reason (illness, domestic affliction, or religious conviction) have 48 hours to contact AND schedule a makeup test with the instructor. The onus is on the student to have a makeup test approved and scheduled within 48 hours, or the makeup test option is forfeited. The same process applies to missed makeup tests. At the instructor's discretion, the makeup test may differ significantly in form and/or content from the missed test. However, the makeup test cannot differ in weight (% of final grade) from the missed test. Except in extenuating circumstances (a documented official University medical excuse), a makeup test must be written within 2 weeks of the missed test. Absence from a final exam, and deferral of a final exam, are handled by Enrolment Services (see [http://www.ucalgary.ca/registrar/deferred\\_final](http://www.ucalgary.ca/registrar/deferred_final)). Students absent from a final exam must notify the instructor within 48 hours and must then apply for an official deferred final exam no later than the deadline indicated in the Examinations Schedule.

### **Freedom of Information and Protection of Privacy (FOIP) Act**

The FOIP legislation disallows the practice of having student's retrieve tests and assignments from a public place. Therefore, tests and assignments may be returned to students during class/lab, or during office hours, or via the Department Office (Admin 275), or will be made available only for viewing during exam review sessions scheduled by the Department. Tests and assignments will be shredded after one year. Instructors should take care to not link students' names with their grades, UCIDs, or other FOIP-sensitive information.

### **Evacuation Assembly Point**

In case of an emergency evacuation during class, students must gather at the designated assembly point nearest to the classroom. The list of assembly points is found at <http://www.ucalgary.ca/emergencyplan/assemblypoints>  
Please check this website and note the nearest assembly point for this course.

### **Student Ombudsman's Office**

The Office of the Student Ombuds provides independent, impartial and confidential support for students who require assistance and advice in addressing issues and concerns related to their academic careers. The office can be reached at 403-220-6420 or [ombuds@ucalgary.ca](mailto:ombuds@ucalgary.ca) (<http://www.su.ucalgary.ca/services/student-services/student-rights.html>).

### **Safewalk**

The safewalk program provides volunteers to walk students safely to their destination anywhere on campus. This service is free and available 24 hrs/day, 365 days a year.  
Call 403-220-5333.

### **Important Dates**

The last day to drop this course and **still receive a tuition fee refund** is **Jan 18, 2013**. Last day for registration/change of registration is **Jan 21 2013**. The last day to withdraw from this course is **Apr 16, 2013**.