

# DEPARTMENT OF PSYCHOLOGY Faculty of Arts

Psychology 617	Advanced Research Design and Analysis II		Winter 2015	
Instructor:	Tom O'Neill	Lecture Location:	Admin 247B	
Phone:	403-220-5207	Lecture Days/Time:	R 2:00-4:50	
Email:	toneill@ucalgary.ca	TA:	Jessie Hart	
		TA Office:	A153	
		Lab Location:	SS 018	
Office:	Admin 264	Lab Day/Time:	Tu 16:00 – 18:50	
Office Hours:	By appointment	Office Hours:	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 (2nd ed.). Sage. The university bookstore should have copies.

#### **Evaluation**

1. Midterm exam: 25% (on material covered to February 12th)

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%
Α	90-95%	В	76-79%	С	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-).

#### Schedule

Date	Topic/Activity/Readings/Due Date (revise and add columns & rows as necessary)
R Jan 15	Course overview, correlation, and other general issues in statistics
T Jan 20	Lab: Introduction to SPSS; Correlation
R Jan 22	Multiple Regression
T Jan 27	Lab: Correlation and Multiple Regression
R Jan 29	Logistic Regression
T Feb 3	Lab: Logistic Regression
R Feb 5	Discriminant Function Analysis and MANOVA
T Feb 10	Lab: Discriminant Function Analysis and MANOVA
R Feb 12	MANOVA Profile Analysis and Exam Review
T Feb 24	Exam review
R Feb 26	Midterm exam
T Mar 3	Exam feedback
R Mar 5	Multilevel Modeling: Nested Designs
T Mar 10	Lab: Multilevel Modeling: Nested Designs
R Mar 12	Multilevel Modeling: Longitudinal Designs
T Mar 17	Lab: Multilevel Modeling: Longitudinal Designs
R Mar 19	Exploratory Factor Analysis (EFA)
T Mar 24	Lab: EFA
R Mar 26	Confirmatory Factor Analysis (CFA)
T Mar 31	Lab: CFA
R Apr 2	Path Analysis & Structural Equation Modeling (SEM) & Exam Review
T Apr 7	Lab: SEM & Exam Review
R Apr 9	Final Exam

# **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; no reappraisal of term work is permitted after the 15 days. 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

Makeup tests/exams are NOT an option without an official University medical excuse (see the University Calendar). A completed Physician/Counselor Statement will be required to confirm absence from a test/exam for health reasons; the student will be required to pay any cost associated with this Statement. Students who miss a test/exam have 48 hours to contact the instructor and to schedule a makeup test/exam. Students who do not schedule a makeup test/exam with the instructor within this 48-hour period forfeit the right to a makeup test/exam. At the instructor's discretion, a makeup test/exam may differ significantly (in form and/or content) from a regularly scheduled test/exam. Except in extenuating circumstances (documented by an official University medical excuse), a makeup test/exam must be written within 2 weeks of the missed test/exam.

#### **Travel During Exams**

Consistent with University regulations, students are expected to be available to write scheduled exams at any time during the official December and April examination periods. Requests to write a make-up exam because of conflicting travel plans (e.g., flight bookings) will NOT be considered except under exceptional circumstances. Students are advised to wait until the final examination schedule is posted before making any travel arrangements.

# 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 <a href="mailto:ombuds@ucalgary.ca">ombuds@ucalgary.ca</a> (<a href="http://www.su.ucalgary.ca/services/student-services/student-rights.html">http://www.su.ucalgary.ca/services/student-services/student-rights.html</a>).

### 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 with no "W" notation and **still receive a tuition fee refund** is **January 23, 2015**. Last day for registration/change of registration is **January 26, 2015**. The last day to withdraw from this course is **April 15, 2015**.