



Psychology 411 (RDC)

Design and Analysis in Psychological Research

Fall 2013

Instructor:	Catherine Phillips	Lecture Location:	1328
Phone:	403-220-8970	Lecture Days/Time:	Mo 14:00-16:50
Email:	ciphilli@ucalgary.ca	Lab Instructor:	Rachel Ross
Office:	Room 2506H	TA Email:	rwross@ucalgary.ca
Office Hours:	By appointment	Lab Location	907B
		Lab Days/Time:	We 15:00-16:50

Course Description and Goals

This course is for students who have completed Psychology 312 (Experimental Design and Quantitative Methods in Psychology). The assumption is that you did well in that course and wish to pursue more advanced studies in research methodology and statistical analysis.

This course is an excellent preparation for introductory graduate-level statistics and methodology courses in psychology. You will learn how to analyze and interpret a wide variety of experimental designs. You will also learn how to use multiple regression procedures to analyze data from experimental and non-experimental studies. You will use SPSS for Windows to perform statistical analyses, and the lectures will rely extensively on the output files from this software.

Prerequisites

Psychology 205 or Psychology 200 and 201 – Principles of Psychology or Principals of Psychology I & II
Psychology 312 – Experimental Design and Quantitative Methods for Psychology

Recommended Text

Leech, N. L., Barrett, K. C., & Morgan, G. A. (2011). IBM SPSS for Intermediate Statistics: Use and Interpretation, 4th Edition, Taylor & Francis

The textbook is available in the RDC bookstore

Calculators

You will need a calculator with statistical functions. The calculator used in Psychology 312 will suffice, however, calculators with graphing capabilities (e.g., TI-83) are not allowed.

Course Website

The course website is located on blackboard: <https://blackboard.ucalgary.ca/webapps/login/>.

Notes and/or materials for each week's classes and labs will be posted on Blackboard to facilitate your learning by **5:00 PM the day before the class or lab**. In addition, announcements, grades, and information regarding lab assignments will be posted on the Blackboard site.

Evaluation

Class component: There will be one in-class mid-term exam (October 28th, scheduled for the first 75 minutes of class) and a take-home final examination (handed out in class on November 25th, due December 9th). The mid-term exam will consist of short answer questions. The mid-term exam is worth 30% of your final grade and the final exam is worth 30%. Both exams will test for material covered in the lectures and in the text and will be cumulative.

The final exam is due in person on December 9th, no later than 3 pm. To be fair to students who submit their exam on time, exams received after this deadline will be considered late and will receive a 10% penalty per day, including weekends. Thus an exam received on December 10th at 6:00 p.m. is two days late and will receive a 20% penalty (i.e., the percentage grade will be reduced by 20%). An exam may be handed in a maximum of 3 days late (incurring a 30% penalty) without an official university excuse. If you are handing in your final exam late, it can be emailed to ciphilli@ucalgary.ca as a PDF file or a Word file. **I must be able to open and read the document for it to be considered received.** Given the wide availability and access to email, any technical issues you experience (e.g., failure of your home internet connection) will not be considered when calculating a late penalty; only the day and time your exam arrives at ciphilli@ucalgary.ca are relevant to that calculation.

Lab component: The lab component of the course is worth 40% of your final grade. The lab component requires you to complete six equally weighted assignments (See the Lab Outline for the list of assignments and due dates; lab assignments will be handed out during the labs and will be posted on Blackboard). **Students must achieve a passing grade on both the class work and the lab component to pass this course.** Lab assignments are to be handed in to the TA at the beginning of the lab on their due date. To be fair to students who submit their assignments on time, late assignments will be accepted only if received within 1 week of the due date, and will be penalized a full letter grade (e.g., a "B+" paper will receive a "C+" grade). Late assignments must be emailed to Rachel (rwross@ucalgary.ca) as a PDF file or a Word file. **She must be able to open and read the document in order for it to be considered received.**

Date	Topic	Assignment
Sept. 11	Review of SPSS Data Processing	
Sept. 18	Review of ANOVA in SPSS	
Sept. 25	Two-factor Independent Groups ANOVA	Receive Assignment 1

Oct. 2	Three-factor Independent Groups ANOVA	Receive Assignment 2 Assignment 1 due
Oct. 9	Two-factor Repeated Measures ANOVA	Receive Assignment 3 Assignment 2 due
Oct. 16	NO LAB	
Oct. 23	Two-factor Repeated Measures ANOVA	
Oct. 30	Mixed Factorial Designs	Receive Assignment 4 Assignment 3 due
Nov. 6	Analysis of Covariance	Receive Assignment 5
Nov. 13	Review and assistance; description of Optional Assignment	Receive Optional Assignment Assignment 4 due
Nov. 20	Regression	Receive Assignment 6 Assignment 5 due
Nov. 27	Multiple Regression	Optional Assignment due
Dec. 4	Multiple Regression	Assignment 6 due at end of lab

****NOTE:** all assignments are due at the start of lab with the exception of Assignment 6 ONLY. To be fair to students who submit their assignments on time, late assignments will receive a 5% penalty per day, including weekends. Late assignments must be emailed to your TA as a PDF file or a Word file.

Midterm Exam	30% of final grade	October 28, 2013
Lab Assignments	40% of final grade	Various due dates, see lab outline
Take Home Final Exam	30% of final grade	December 9, 2013 @ 5pm

Topics that will be covered

Review of Analysis of Variance, Multiple Comparisons
Factorial Analysis of Variance (Independent Groups)
Factorial Analysis of Variance (Repeated Measures)
Mixed Factorial Design

Midterm exam

Analysis of Covariance
Regression and Multiple Regression

Take home final exam

Department of Psychology Grade Distribution Policy

The distribution of grades in Psychology courses (the percentage of A grades, B grades, etc.) will be similar to the distribution of grades in other courses in the Faculty of Arts. The Department monitors the grade distributions of 200-, 300-, and 400-level courses in the Faculty to ensure that the grade distributions in Psychology courses are comparable. Based on these reviews, students can expect that 1) up to 30% of grades in 200- and 300-level psychology courses will be "A" grades (A+, A, and A-), and 2) up to 40% of grades 400-level psychology courses will be "A" grades.

Department of Psychology Criteria for Letter Grades

Psychology professors use the following criteria when assigning letter grades:

A+ grade: *Exceptional Performance.* An A+ grade indicates near perfect performance on multiple choice and short answer exams. For research papers/essays/course projects/presentations, an A+ grade is awarded for exceptional work deserving of special recognition and is therefore not a common grade.

A, A- Range: *Excellent Performance.* Superior understanding of course material. Written work is very strong in terms of critical and original thinking, content, organization, and the expression of ideas, and demonstrates student's thorough knowledge of subject matter.

B Range: *Good Performance.* Above average understanding of course material. Written work shows evidence of critical thinking and attention to organization and editing but could be improved in form and/or content.

C Range: *Satisfactory Performance.* Adequate understanding of course material. Knowledge of basic concepts and terminology is demonstrated. Written work is satisfactory and meets essential requirements but could be improved significantly in form and content. Note: All prerequisites for courses offered by the Faculty of Arts must be met with a minimum grade of C-.

D range: *Marginally meets standards.* Minimal understanding of subject matter. Written work is marginally acceptable and meets basic requirements but requires substantial improvements in form and content. Student has not mastered course material at a level sufficient for advancement into more senior courses in the same or related subjects.

F grade: *Course standards not met.* Inadequate understanding of subject matter. Written work does not meet basic requirements. Student has not demonstrated knowledge of course material at a level sufficient for course credit.

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-).

Tentative Lecture Schedule

Date	Topic/Activity/Readings/Due Date
M Sep 9	Lecture begins.
M Sep 16	
F Sep 20	Last day to drop full courses (Multi-term) and Fall Term half courses. No refunds for full courses (Multi-term) or Fall Term half courses after this date.
M Sep 23	Last day to add or swap full courses (Multi-term) and Fall Term half courses. Last day for change of registration from audit to credit or credit to audit.
M Sep 23	
F Sep 27	Fee payment deadline for Fall Term full and half courses.
M Sep 30	
M Oct 7	
M Oct 14	Thanksgiving Day, University closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.
M Oct 21	
M Oct 28	Midterm exam scheduled for the first half of class
M Nov 4	
Nov 9-12	Reading Days. No lectures.
M Nov 11	Remembrance Day (Observed). University Closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.
M Nov 18	
M Nov 25	
M Dec 9	Take home final due by 5 pm
F Dec 6	Fall Term Lectures End. Last day to withdraw with permission from Fall Term half courses.
Dec 9-19	Fall Term Exam Period.

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 assembly point for our classroom is posted near the door to the class. Please check the location of the nearest assembly point for this course at the start of the semester.

Safewalk Program

The RDC Safewalk program was developed by Campus Security as a safety initiative for the campus community. This service is in place to ensure the safety of our students, faculty, staff and visitors as they travel about the Campus, particularly during evenings and after hours. The program is available to anyone on campus.

To request a Safewalk, visit the Security Centre desk located at the main entrance of the campus, or call security at 403.342.3445 (Local 3445 from any campus phone). One of the on-duty Commissionaires will meet you at your location and provide an escort for you to your office, vehicle, or other requested destination on campus.

For more information on RDC's Safewalk program, please contact Vern May, Manager, Security and Emergency Response at 403.357.3696 or email vernon.may@rdc.ab.ca.

Student Ombudsman's Office

The Office of the Student Ombudsmen 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 (<http://www.su.ucalgary.ca/services/student-services/student-rights.html>).

Important Dates

The last day to drop this course with no "W" notation and **still receive a tuition fee refund** is **September 20, 2013**. Last day for registration/change of registration is **September 23, 2013**. The last day to withdraw from this course is **December 6, 2013**.