

# Department of Psychology Psychology 615 (L01) – Advanced Research Design & Analysis I Fall 2008

Instructor: Phone: Email: Office:	Charles (Chip) Scialfa 220-4951 scialfa@ucalgary.ca 151B	Lecture Location: Lecture Days/Time:	<b>A253</b> MW 900-1015
Office Hours:	TBA	Lab Location	Tri-Faculty Mac Lab SS018
Teaching Assistant Phone: Email: Office: Office Hours:	Jenn Nicol 220-6348 jenicol@ucalgary.ca A141 E By appointment	Lab Days/Time	F 9-1145

# **Course Description and Goals**

Applications of the general linear model to research design and analysis. Topics include analysis of variance, regression and analysis of covariance.

# **Required Text**

Maxwell, S.E. & Delaney, H.D. (2004). <u>Designing experiments and analyzing data: A</u> <u>model comparison perspective</u>, 2nd Ed. Mahwaj, NJ: Lawrence Erlbaum Associates.

#### Evaluation

There will be one mid-term and one final exam, specific dates to be decided after consulting with the class. The mid-term exam will be in class. The final exam will be over a 1-day (9 am to 5 pm period). They will each be a combination of true-false, short answer and computational questions. Each will count 33% of your final mark. The remainder of your final mark will come from the lab component. Students must achieve a passing grade on both the class and lab components to pass this course.

# **Grading Scale**

A+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
А	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-).

# Lecture Schedule

September 2-6, 2008	Block Week	Chapters	Notes
Mon Sept 8	Fall Session lectures begin	1,2	1,2
	Logic of Experimental Design		
Weds Sept 10	Logic of Experimental Design		
Fri Sept 12	Lab 1 – SPSS Intro		
Mon Sept 15	Logic of Experimental Design	2,3	2, 3.1
Weds Sept 17	Logic of Experimental Design		
Fri Sept 19	Last day for Fall registration and change of registration		
	for Fall Session or full courses. No fee withdrawals after		
	this date.		
	Lab 2 - Data Coding and Descriptive Statistics		
Mon Sept 22	One-Way Between-Subjects Designs	3	3.1, 3.2
Weds Sept 24	One-Way Between-Subjects Designs		
Fri Sept 26	Lab 3 – Plotting Data		
Mon Sept 29	One-Way BS Designs	3	3.1, 3.2
Weds Oct 1	One-Way BS Designs		
Fri Oct 3	Lab 4 – One-Way ANOVA		
Mon Oct 6	Individual Means Comparisons	4	4
Weds Oct 8	Multiple Comparisons	5	5
Fri Oct 10	Lab 5 Orthogonality and Multiple Comparisons		
Mon Oct 13	Thanksgiving – University closed		
Weds Oct 15	Trend Analysis	6	6
Fri Oct 17	Lab 6 – Trend Analysis		
Mon Oct 20	Two-Way Between-Subjects Designs	7	7.1, 7.2
Weds Oct 22	Two-Way Between Subjects Designs		
Fri Oct 24	Lab 7 – 2 X 2 Factorial Designs and Simple Effects		
Mon Oct 27	Test 1 – Only Up To One-Way Designs	1-6	
Weds Oct 29	Higher-Order BS Designs	8	8
Fri Oct 31	Lab 8 – Higher Order BS Designs (No Assignment)		
Mon Nov 3	ANCOVA	9	9.1
Weds Nov 5	ANCOVA	9	9.2
Fri Nov 7	Lab 9 – ANCOVA & ANCOHET		
Mon Nov 10	Reading Days Nov 8-11 no lectures	1	
Weds Nov 12	One-Way Within-Subjects Designs	11	10
Fri Nov 14	Lab 10 – ONE-WAY WS ANOVA		
Mon Nov 17	One-Way and Higher-Order WS Designs	12	12
Weds Nov 19	Higher-Order WS Designs	12	12
Fri Nov 21	Lab 11 – Higher-Order WS Designs		
Mon Nov 24	MANOVA	13	13

Weds Nov 26	MANOVA	None	none
Fri Nov 28	Lab 12 - MANOVA		
Mon Dec 1	Log-linear models		
Weds Dec 3	Review		
Thurs Dec 4	Last day to allocate research participation bonus credit		
Fri Dec 5	Lab 13 - Review		
	Fall Session lectures end. Last day to withdraw.		
Dec 8- Dec 17	Final exam (TBA).		

# **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 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**

Make-up exams are NOT an option without an official University medical excuse (see the University Calendar). You must contact the instructor <u>before</u> the scheduled examination or you will have forfeited any right to make up the exam. At the instructor's discretion, a make-up exam may differ significantly (in form and/or content) from a regularly scheduled exam. Except in extenuating circumstances (documented by an official University medical excuse), a makeup exam is written within two (2) weeks of the missed exam. A completed Physician/Counselor Statement will be required to confirm absence from a test for health reasons. The student will be required to pay any cost associated with the Physician Counselor Statement.

# **Important Dates**

The last day to drop this course and still receive a fee refund is **September 19, 2008**. The last day to withdraw from this course is **December 5, 2008**.