## Psychology 218 - Section 001 (Winter 2008) Analysis of Behavioural Data Dr. Linda Scratchley

Time/Place: Mondays, Wednesdays and Fridays 10:00 - 11:00 a.m.; SWING 222

**Instructor:** Linda Scratchley

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Phone #: (604) 822-5581 (Pager #: 604-605-9199 for emergencies)

Office Hour: Mondays 12:15-1:15 p.m. or by appointment.

Course TA: Evan Ardiel

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Required Text: Hopkins, K. D., Hopkins, B. R., & Glass, G. V. (1996). Basic Statistics for the

Behavioural Sciences (3rd edition). Boston, MA: Allyn and Bacon.

<u>Course Pack</u>: A course pack containing copies of the lecture overheads are available at the bookstore.

<u>Required Equipment</u>: You will need a calculator for this course. My recommendation is to buy the cheapest statistical calculator that you can find.

Course Objectives: This course is designed to provide the student with a basic understanding of how to analyze research data in the behavioural sciences. Topics covered include an introduction to the most frequently used descriptive statistics (central tendency, variability, standard scores, correlation, regression) and an introduction to the most frequently used inferential statistics (confidence intervals, z-test, t-test, analysis of variance, and multiple comparisons). The lectures are intended to supplement and demonstrate material from the text. Students are responsible for material presented in the text and in class lectures.

Evaluation: Four examinations, each contributing 25% to the final grade, will be given throughout the course. The weighted sum of the four exams will constitute your Psychology 218 course grade. The exams will not be cumulative, although the material from each subsequent section of the course is built upon the material from the previous sections. Students may also earn a maximum of 2 additional percentage points for participating in experiments through the Psychology Department Subject Pool. Sign up for experiments at <a href="http://hsp.psych.ubc.ca/">http://hsp.psych.ubc.ca/</a>.

<u>Assignment</u>	Percent	Due Date	Topic
Midterm 1	25%	Feb. 4	Chapters 1-5
Midterm 2	25%	Mar. 3	Chapters 6-8
Midterm 3	25%	Mar. 28	Chapters 9-11
Final Exam	25%	TBA	Chapters 13-14

In order to reduce grade inflation and maintain equity across multiple course sections, all psychology courses are required to comply with departmental norms regarding grade distributions. According to departmental norms, the mean grade in a 300-level class is 70 for a good class, 68 for an average class, and 66 for a weak class, with a standard deviation of 13). The corresponding figures for 100- and 200-level Psychology courses are 67, 65, and 63, with a standard deviation of 14. Scaling is likely to be used in order to comply with these norms; grades may be scaled up or down as necessary by the professor or department.

Missed Exams and Late Assignments: Students must inform the instructor if an exam is to be missed. With few exceptions, a medical certificate must also be produced or the student will receive a grade of 0. Late homework assignments will be accepted, but 5% of the grade will be deducted for each day late.

<u>Psychology Department's Position on Academic Misconduct</u>: Cheating, plagiarism, and other forms of academic misconduct are very serious concerns of the University, and the Department of Psychology has taken steps to alleviate them. The Department has implemented software that can reliably detect cheating on multiple-choice exams by analyzing the patterns of students' responses.

In all cases of suspected academic misconduct, the parties involved will be pursued to the fullest extent dictated by the guidelines of the University. Strong evidence of cheating or plagiarism may result in a zero credit for the work in question. According to the University Act (section 61), the President of UBC has the right to impose harsher penalties including (but not limited to) a failing grade for the course, suspension from the University, cancellation of scholarships, or a notation added to a student's transcript.

All graded work in this course, unless otherwise specified, is to be original work done independently by individuals. If you have any questions as to whether or not what you are doing is even a borderline case of academic misconduct, please consult your instructor. For details on pertinent University policies and procedures, please see Chapter 5 in the UBC Calendar (http://students.ubc.ca/calendar).

## Outline:

Date	Topic(s)	Chapter(s)
Jan. 7/9/11	Frequency Distributions	1, 2
Jan. 14/16/18/21	Central Tendency, Variability	3, 4
Jan. 23/25/28	Normal Distribution, Standard Scores	5
Jan. 30 Feb. 1	Correlation	6
Feb. 4	Midterm 1	1-5
Feb. 6/8	Correlation	6, 7
Feb. 11/13/15	Regression	8
Feb. 18/20/22	Spring Break (NO CLASS)	
Feb. 25	Regression	
Feb. 27/29	Sampling, Interval Estimation	9
Mar. 3	Midterm 2	6-8
Mar. 5	Sampling, Interval Estimation	9
Mar. 7/10/12	Inferences Regarding the Population Mean	10
Mar. 14/17/19	Statistical Hypotheses Involving Two Means	11
Mar. 21/24	Good Friday / Easter Monday (NO CLASS)	
Mar. 26	Inferences Regarding Correlations	13
Mar. 28	Midterm 3	9-11
March 31 April 2	Inferences Regarding Correlations	13
April 4/7/9/11	One-Factor Analysis of Variance	14