Professor James T. Enns Office Kenny 3108 Email: jenns@psych.ubc.ca

Phone 604-822-6634

Lectures TTh 8:00-9:20 am Swing 107

Wed 2:00-3:50 pm Swing 107 (Term 2 Swing 109) Lab

Project Coordinator Allison Brennan Kenny 3606 Email: allisonabrennan@gmail.com Teaching Assistant Ana Pesquita Kenny 3606 Email: anapesquita@psych.ubc.ca

Course Description

In this course you will become an informed consumer, user, and designer of behavioral research methods. This means learning how to organize data, perform various statistical procedures, plan experiments, and communicate your research in words and in print. There are three distinct parts to the course. One deals with the nuts and bolts of statistical analysis and research design; this will be covered in Tue-Th lectures and the Pagano textbook. A second part deals with the hands-on analysis of various data sets; here SPSS software package is a primary resource. But this course is worth 8 (not 6) credits. That means there is also a laboratory project in this course that runs parallel to the lecture component. Think of this as your "thesis project," the one that will indicate to your future employers and academic supervisors that you are able to conduct all the steps in a research project, from understanding its purpose to communicating its findings. 30% of your entire grade in this course is based on your work on this project. The special Project Coordinator is entirely responsible for setting and grading your assignments in this portion of the course. More details concerning this part of the course will be given to you in the Lab scheduled for this course.

Approach to Learning

Lectures cover basic statistical concepts and methods. There is much overlap with the textbook, but lecture material is presented from a somewhat different perspective, in order to give optimal opportunity for different learning styles. Lectures and assignments emphasize "active learning." You will consistently be encouraged to ask "what if?" and "let's see how things look differently if we do them this way." The SPSS and project portions of the course are even more "hands on." It is ultimately your responsibility to make sure that your work in the project is on a topic of interest to you that you are getting the supervision you need to complete the project. As we say at UBC, tuum est!

Requirements

Calculator It is your responsibility to bring one to each class and exam. It should have basic memory functions and a square root function. You will need to use it fluently to succeed. You will not be permitted to use other hand held devices (i.e., phones) as a calculator.

Textbook Understanding Statistics (10th edition or earlier), by R. Pagano Software SPSS Student Version (bundled with text at the UBC Bookstore)

Weekly Homework

Ten (10) weekly homework assignments found at the end of each chapter (any 10 chapters for 1 point each. Answers to many questions can be found at back of text). These are NOT graded. We simply collect them and note them as 1 (complete) or 0 (missing). All homework is due each Tuesday, exactly

one week from when it is listed in the course schedule (e.g., Chap 1 due Sept 13). No exceptions and no grade for late assignments.

SPSS Assignments

Four (4) assignments will demonstrate your ability to use SPSS to accomplish basic statistical and graphing functions. During the lab, the TA will give a brief lecture showing how to perform a number of introductory functions with SPSS. Short lab assignments will be given that you will have time to work on in the lab and ask questions, as well as during class time. Assignments are due the following week at the **beginning** of the lab.

Grading

Exams will cover material from the lectures, labs and textbook. Expect the end of year grades to have a mean of 75% and a standard deviation of 11%.

Midterm exams 40% Weekly homework 10% SPSS labs exam 10% In class participation 10% Presentations 5% Research Project 25%

Missed Exam and Assignment Policy

Only medical reasons will be accepted for missing an exam or assignment. For any absence you must call my office (822-6634) or the Psychology Department office (822-2755) in advance of the deadline. If you show up AFTER a deadline saying you were sick, you will receive no credit.

Psychology Department's Position on Academic Misconduct

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. In the first place, the Department has implemented software that, can reliably detect cheating on multiple-choice exams by analyzing the patterns of students' responses. In addition, the Department subscribes to TurnItIn--a service designed to detect and deter plagiarism. All materials (term papers, lab reports, etc.) that students submit for grading will be scanned and compared to over 4.5 billion pages of content located on the Internet or in TurnItIn's own proprietary databases. The results of these comparisons are compiled into customized "Originality Reports" containing several, sensitive measures of plagiarism; instructors receive copies of these reports for every student in their class. 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) and read the University's Policy 69 (www.universitycounsel.ubc.ca/policies/policy69.html).

Week Chapter and Lecture Topic

Sep 06 Chap 1 Introduction to behavioral research and statistics

Sep 11 Chap 2 Basic measurement concepts

Sep 18 Chap 3 Frequency distributions

Sep 25 Chap 4 Central tendency and variability

Oct 02 MIDTERM EXAM 01 IN CLASS

Oct 09 Chap 5 Normal curve and standard scores

Oct 16 Chap 6 Correlation

Oct 23 Chap 7 Linear Regression

Oct 30 MIDTERM EXAM 02 IN CLASS

Note times are WED 2-4 pm. ** Bring your laptop to all SPSS labs **

Note Tue-Thurs 8-9:30 am for unsupervised SPSS group activities

Nov 31 SPSS Lab 01: Introduction to SPSS

Nov 07 SPSS Lab 02: Working With Data

Nov 14 SPSS Lab 03: Correlation/Regression

Nov 21 SPSS Lab 04: T-Tests and ANOVA

Nov 28 SPSS LAB EXAM

Note back to Tue-Thurs 8:00 am lecture schedule

Jan 03 Chap 10/11 Hypothesis Testing & the Sign Test /Statistical Power

Jan 08 Chap 12 Sampling Distributions & the z-test

Jan 15 Chap 13/14 t-Tests

Jan 22 MIDTERM EXAM 03 IN CLASS

Jan 29 Chap 15 Analysis of variance

Feb 05 Chap 15 Multiple Comparisons

Feb 12 Chap 16 Two-way ANOVA

Feb 18-22 No Classes — Study Break

Feb 26 Chap 16 Factorial ANOVA

Mar 05 MIDTERM EXAM 04 IN CLASS

Mar 12 PROJECT PRESENTATIONS in class

Mar 19 PROJECT PRESENTATIONS in class

Mar 26 PROJECT PRESENTATIONS in class

Apr 02 PROJECT PRESENTATIONS in class

Apr 09 Final Project Paper due by 4:00 pm to Project Coordinator

^{**} All grade appeals must be made in writing to Dr. J. Enns, 3108 Kenny Building **