Dr. Jeremy Biesanz
Psychology 218 (Lecture 007) Analysis of Behavioral Data
Syllabus: Term 2 2005

Course Information and Objective
Lecture: M/W/F 10-11AM 104 Henry Angus
The purpose of this course is develop skills in thinking, learning, and reasoning with empirical data, with an emphasis on the field of Psychology. Although one mission is to prepare psychology undergraduates for further coursework in their major, the basic statistical concepts and methods are common to the behavioral sciences and broadly applicable. I realize that at the outset of this course that (for some of you) statistics may be the most dreaded part of your social science academic careers. I hope by the end of the semester you will have discovered that statistics is a logical, orderly, and very understandable subject.

Office and Appointments
Professor: Jeremy Biesanz, Assistant Professor
Teaching Assistant: Annie Block

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Email: annie.block@gmail.com
Office Hours: Wed 1-2 or by appt.
Office Hours: Wed 4-5 or by appt.
Phone: (604) 822-6493
Course website: http://www.psych.ubc.ca/jbiesanz/
Please make an appointment with one of us if you are having problems understanding the material covered in the course.

Course Website:
I will frequently provide handouts on the class website prior to lecture which summarize the material presented in lectures as well as provide specific worksheets for that lecture. Note that the lecture notes and handouts complement the textbook and are not intended to replace the assigned readings. Check the website before class and print out any handouts that are provided for the lecture that day. Normally materials should be on the website at least several days before class, but at the latest, it will be the night before class.

Text
Gravetter, F. J., & Wallnau, L. B. (2004). *Statistics for the Behavioral Sciences* (6 Th Edition). Belmont, CA: Wadsworth/Thompson Learning.
•Note that we will also read several original sources during this semester. Copies of these will be available on the course website (http://www.psych.ubc.ca/jbiesanz/).

Calculators
You should have access to a simple calculator which computes square roots. In addition, two other mathematical operations that will facilitate calculations on homework sets and tests are the computation of sums $\sum (X)$ and sums of squared scores $\sum (X^2)$.

Please bring your calculator to both class and to the exams. Particularly in the second half of the course we will work out specific problems in lecture and a calculator is essential for these problems.

Subject Pool Participation
You may earn a total of 4 extra-credit points by participating in the psychology subject pool.

Grading
Each exam will cover material from the lectures and the textbook. If necessary, grades will be scaled to that the class mean is approximately 68% and the standard deviation is 14%.
Midterm Exam #1
20%
Midterm Exam #2
20%
Final Exam
35%
Problem Sets
25%
Subject Pool Credits +4%

Exam Policy
There will be three *relatively* non-cumulative exams. Only medical reasons will be accepted for missing an exam. *For any absence* you must call my office (**822-6493**) or the Psychology Department office (**822-2755**) *in advance of the exam*. If you show up after an exam saying you were ill, you will receive no credit.

Problem Sets
There will be 5 problem sets that are due at the beginning of lecture on the date indicated on the syllabus. These are graded from 5(exceptional) – 4 (complete) – 3 (adequate) – 0 (missing).

Given the large size of this class we will not be able to return assignments promptly. Consequently a solution key will be posted on the class website the following day – keep a copy of your problem set in order to examine your own work and solutions. **No grade for late assignments.**

Strategy for the Course
•It is critical to keep up with the course on a *weekly* basis. As soon as you can, identify several classmates from whom you can get notes should you miss class. It has been my experience that students tend to have difficulty studying on their own without attending class. Coming to class and completing the problem sets will help you keep up and will help to check your understanding of the material.

•It is a good strategy to review your notes from the previous lecture before coming to class. In this way you will discover any parts of your notes that don't make sense, and you can ask for clarification in class.

•The format of the course will be lectures in conjunction with problems sets and exams covering the material discussed. I will look to you throughout the course for feedback about your level of understanding. *YOU SHOULD ASK QUESTIONS IN CLASS*. If you have a question, it is very likely that other students in the room have the same question. It helps to actively participate

in class. So come to class, do the problem sets, review your notes regularly, and ask questions. If you do, the course won't be difficult and you'll do well.

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 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 (available at http:/www.universitycounsel.ubc.ca/policies/policy69.html).

Tentative Class Schedule
Week
Chapter
Topic
Descriptive Statistics (Weeks 1-3)
1. Jan 5
Chap 1-2
Introduction to statistics
2. Jan 10 Chap 3-4
Descriptive Statistics
3. Jan 17 Chap 5
Descriptives and Transformations
PS#1 DUE Jan 17 in class
*** Jan 21 Midterm Exam (#1) in Class Friday Jan 21
Introduction to Inferential Statistics (Weeks 4-6)
4. Jan 24 Chap 6-7
Probability and Sampling Distributions
5. Jan 31 Chap 8
Point Estimation & Hypothesis Testing
PS#2 DUE Jan 31 in class
6. Feb 7
Chap 9
One Sample Tests (z and t)
7. Feb 14 *** No Classes - Spring Break ***
Topics in Inferential Statistics (Weeks 8-14)
8. Feb 21 Chap 10-11
Independent and Related Sample t-tests
PS#3 DUE Feb 23 in class

9. Feb 28
Chap 13
One-Way ANOVA
*** Feb 28 Midterm Exam (#2) in Class Monday Feb 28
10. Mar 7
Chap 15
Two-Way ANOVA
11. Mar 14 Chap 16
Correlation and Linear Regression
PS#4 DUE March 14 in class
12. Mar 21
Linear Regression (and Review)
Mar 25
Easter Holiday – University Closed
13. Mar 28
Easter Holiday – University Closed
Mar 30 Chap 17-8
Ordinal Relationships
14. Apr 4
Chap 16
Integration and Advanced Topics (Resampling, etc.)
PS#5 DUE April 8 in class
FINAL EXAM: Check university schedule for final exam time and place
** All grade appeals must be made in writing to Dr. Jeremy Biesanz, 2037 Kenny Building