



Society for the Teaching of Psychology (APA Division 2)
OFFICE OF TEACHING RESOURCES IN PSYCHOLOGY (OTRP)

Department of Psychology, University of St. Thomas, 3800 Montrose Blvd., Houston, TX 77006

Psychology 3214

Quantitative Methods

Fall 2001

Section 3/4: 10:30 to 11:45 TTH EN 514

Section 5/6: 2:00 to 3:15 TTH PS 355

Instructor: Dr. Melanie Page

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Office Hours: T 12:15 to 1:45 or by appointment (no appts on Fridays).

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Teaching Assistant for Section 3/4: Kirstan Neukam, nkirsta@okstate.edu

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Teaching Assistant for Section 5/6: Kim Haala, roozen@okstate.edu

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Office Hours: MW 10-11 (M in 015)

“It’s a funny thing about life; if you refuse to accept anything but the best, you very often get it.”

W. Somerset Maugham

If you are having problems in this class, please see one of us immediately. To do well in this course, you must understand the basics in the beginning, so if you have a question, please ask. The only dumb question is the one you don’t ask and then get wrong on an exam.

Philosophy: Statistics does not have to be your worst class, and you don’t need to be a math genius to do well. This class will emphasize the nuts and bolts of how and why we do statistics, with particular emphasis on research in psychology. The course consists of lecture, handouts, homework and tests, in-class group work, and a computer lab. I try and make this class fun and interesting (or at least not painful), but remember you are ultimately responsible for how you do in this class.

The following pertains to the lecture section of the class. There will be a separate syllabus for the computer lab.

Attendance: I take roll each day. Absences in this class can be devastating to progress. There is no penalty per se for missing class, but you are responsible for all assignments and announcements. Historically students who do poorly in this class have poor attendance records, so if you want to do well attend class and keep up with the assignments.

Classroom ethics: Cheating is unacceptable and if you cheat you will receive the negative of the amount of points that assignment was worth. If you are cheating on a test, you will get a -100% for that test. A report will also be filed with University Officials. You may work with others on homework, but ultimately the work you turn in must be your own.

Disruptive and rude behavior is unacceptable and will not be tolerated.

Any student who needs special accommodations must see me after the first class period to make proper arrangements.

I will not take any actions to withdraw you from this class. If you need to withdraw you will need to pursue those options. I suggest talking to me before withdrawing to see if there are any other options.

Calculator: You should have a simple calculator that can take square roots. You should bring your calculator to class.

Text: There is no specific text for this class. Rather there are extensive handouts that were written by Dr. Leona Aiken at Arizona State University, that are available at the Cowboy Copy Center in the Student Union. This is not an optional study guide, it is the text you need for the course.

Class set-up: You will be assigned to groups during the first class. When we do group work, we will mainly use these groups. One of the things we are going to do to make the numbers we work with more meaningful is to collect our own data. Each group will come up with a survey topic and 10-15 questions and we will administer these around campus on 10/12. Don't worry, this project will not involve outside class time nor will there be any group grades. More details about this will be given out in class.

POINTS

Tests: There are five non-cumulative tests. You must take all tests. Makeups are given only in documented emergencies and must be approved by instructor prior to your missing the exam. One test will be take-home. This will be given out at the end of class (no exceptions) and must be handed in at the beginning of the class period in which due. Failure to turn the test in on time will result in the loss of a letter grade for every day it is late. There will be computer printout on the exams, so I suggest you take really good notes in lab. The first three tests will be worth 50 points; the last two are worth 25 points each. You may bring an 8.5 by 11 "cheat sheet" single-sided to exams 2 - 5.

Homework: There are 14 problem sets. Problem sets will be graded on a 5-point scale (5 = excellent, 4 = very good, 3 = good, 2 = fair, and 1 = poor). Homework will consist of hand worked and computer worked problems. The problem sets are directly tied to the lecture and lab and follow examples in the handouts. The problem sets are designed to help you keep up with the class and prepare for tests. The class material is cumulative. If you fall behind at some point, recovery will be difficult. Please keep up with the class. There are 70 possible homework points.

The rules for the grading of problem sets are as follows:

1. Problem sets must be turned in at the beginning of class on the due date to receive credit. **NO EXCEPTIONS.**
2. If you turn in a PS after the due date but before the PS is returned to class you will get a zero.
3. **If you fail to turn in a PS, you will receive a grade of -2.** For any problem sets in which the solution is handed out in class, if you did not turn it in at the beginning of class, you will receive a -2 on it.

Your problem sets must be neatly written, with the questions in the set done in order and clearly numbered. Staple your problem sets. Do not use the ragged paper torn out of notebooks. If a problem set is illegible, it will be returned to you ungraded, and for zero points credit.

Survey Points: We will be collecting data for our surveys on 10/12. Attendance and participation is worth 5 points.

Projects: There will be 3 lab projects worth a total of 75 points.

Bonus Points: You can receive up to 5 extra credit points for research participation. You can either participate in experiments or attend colloquiums announced in class.

Final Grade: Your final grade for the course will be based upon the total number of points you receive. There are 340 possible points, if you get 91-100% of the points you get an A; B, 80-90%; C, 70-79%; D, 60-69%; F, 59% or less. Note that the grading scale for an A is slightly tougher than most classes, but this is a junior level class and your work in here should reflect that. Also note, for final grades, I will follow the rules of rounding and will only round up if your decimal is .5 or above, so a 90.3% would be a B. There are no exceptions because you have ample opportunity to get enough extra credit to push yourself into the .5 range.

The syllabus is my best guess at what we will cover and what our pace will be. As such, it is subject to revision. Any changes in due dates or test dates announced in class supersede those in the syllabus.

Class Outline

8/21 to 9/13

- Introduction
- Terms, Mathematical Concepts
- Frequency Distributions
- Central Tendency
- Variability
- Normal Distributions

9/13 Review for test 1

9/18 TEST 1

9/20 to 10/11

- Sampling Distributions
- Point Estimation
- Confidence Intervals
- Hypothesis Testing

10/2 No class, fall break

10/9 Review for test 2; Collect data for surveys

10/16 TEST 2

10/18 to 11/1;

- 1 sample t-tests
- Effect Size and Power
- 2 sample nonrepeated measures tests
- Repeated measures, matched pairs designs

11/1 TEST 3 given out DUE 11/6 at the beginning of class – NO EXCEPTIONS

11/6 to 11/20

- 1 factor ANOVA
- 2 factor ANOVA

11/20 TEST 4

11/22 to 12/6

- Correlation
- Regression

11/22 no class for Turkey Break

10:30 am class: 12/13 from 2:30 to 4:20 FINAL EXAM

2 pm class: 12/11 from 2:30 to 4:20 FINAL EXAM

Due Dates for Problem Sets

Set	Date
1	8/28
2	8/31
3	9/5
4	9/12
5	9/14 in class
6	9/28
7	10/10
8	10/12 in class
9	10/24
10	10/31
11	11/7 in class
12	11/14
13	11/16
14	12/7 in class