University of Oregon
College of Arts and Sciences
Department of Psychology

Psychology 302
Statistical Methods in Psychology

Instructor Information

Instructor: Kean H Chew
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Office Hours: WF 12-1 pm and by appointment
Course Hours: MWF 11-11:50 pm, 142 Straub

Lab TA: Sue Rao
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Office Hours: H 11:30-12:30 pm and by appointment
Section Hours: W 1-1:50 pm, 244 Gilbert

Purpose and Objectives

The purpose of this course is to provide you with an introduction
to the statistical methods that are generally applied in
psychological research. Topics that will be covered will
include, but not limited to, descriptive statistics, correlation,
regression, sampling distribution, hypothesis testing, confidence
intervals, sample vs. population means, independent groups and
correlated (dependent) samples t-tests, and chi-square test.
Emphasis will be on both understanding and computational skills.

Course Requirements

Textbook and Readings:
Witte, R. S. (1993). Statistics (Fourth Edition).
You are strongly urged to read the chapter that will be covered
in the lecture before coming to class.

Class Meetings:
The topics, for the most part, are highly related to one another.
Your **regular attendance** is important to enable you to see the
continuity of the materials covered. This will in turn
facilitate your understanding of the subject matter. Bring your
textbook to class as I will be referring to it from time to time.
A calculator will be handy on those times when we work through
sample problems together.

<u>Lab Meetings</u>:
Although not mandatory, you are encouraged to attend lab meetings. Your lab instructor will
1) reiterate and emphasize the key concepts covered in lectures
2) answer queries related to homework questions
3) answer queries you might have regarding the subject matter.
and 4) return graded assignments and midterm examination.

Your lab instructor may have additional assignments.

<u>Homework</u>:
There will be a total of seven assignments. As the midterm and final examinations will be similar to the questions of the homework assigned, you should put in the necessary effort to understand the underlying expectations from each assignment.
Late homework will not be accepted without prior consent from the instructor.

<u>Examinations</u>
There will be a midterm examination and a final examination. The format of the examinations will be announced in class. Here's the part you will all like: **Both examinations are open book and open notes** to make rote memorization unnecessary. However, be advised that, even with the open book and open notes policy, you should have a thorough understanding of the materials presented in order to do well in the course. No amount of last minute work will help. **Unless for medical reasons, there will be not be any make up examinations.** Please make your travel plans accordingly.

In addition to your books, notes, and pen/pencil, you should bring along a **CALCULATOR** and scratch papers to the examinations.

Course Evaluation

Homework   21%

Midterm Examination   40%

Final Examination   40%

Tentative Course Schedule

The schedule is subject to change. You are strongly urged to read the chapter that will be covered in the lecture before coming to class. From time to time it might be instructive to pause, reflect, and review what has been covered. These are the purposes of the so-called Overflow Days. If we are behind schedule, these days may be used as catch up days. Once again, take note that late homework will not be accepted without prior consent from the instructor. Unless for medical reasons, there will not be any make up exams. Make your travel plans accordingly.

Week One
Wed, January 4:   Orientation

Fri, January 6:   Chapter 1 - Introduction
                 &   Appendix B - Levels of Measurement

Week Two
Mon, January 9:   Chapter 2 - Describing Data with Tables

Wed, January 11: Chapter 3 - Describing Data with Graphs

Fri, January 13: Chapter 4 - Describing Data with Averages
                                     Homework 1 will be distributed

Week Three
Mon, January 16: Martin Luther King holiday; No lecture

Wed, January 18: Chapter 5 - Describing Variability

Fri, January 20: Overflow Day
                                     Homework 1 due - Class time
                                     Homework 2 will be distributed

Week Four
Mon, January 23: Chapter 6 - Normal Distributions (I): Basics

Wed, January 25: Chapter 7 - Normal Distributions (II): Applications

Fri, January 27: Chapter 9 - Describing Relationships: Correlation
                                     Homework 2 due - Class time
                                     Homework 3 will be distributed

<u>Week Five</u>
Mon, January 30: Chapter 10 - Prediction

Wed, February 1: Chapter 10 - Prediction

Fri, February 3: Overflow Day
                              Homework 3 due - Class time
                              Homework 4 will be distributed

<u>Week Six</u>
Mon, February 6:   Review

Wed, February 8:   Midterm

Fri, February 10: Chapter 11 - Populations, Samples, and Probability

<u>Week Seven</u>
Mon, February 13: Chapter 12 - Sampling Distribution of the Mean

Wed, February 15: Chapter 13 - Introduction to Hypothesis Testing

Fri, February 17: Chapter 14 - More about Hypothesis Testing
                              Homework 4 due - Class time
                              Homework 5 will be distributed

<u>Week Eight</u>
Mon, February 20: Chapter 15 - Estimation

Wed, February 22: Overflow Day

Fri, February 24: Chapter 16 - t Test for One Sample
                              Homework 5 due - Class time
                              Homework 6 will be distributed

<u>Week Nine</u>
Mon, February 27: Chapter 17 - t Test for Two Independent Samples

Wed, March 1:   Chapter 18 - t Test for Two Dependent Samples
                              Homework 6 due - Class time
                              Homework 7 will be distributed

Fri, March 3:   Overflow Day

<u>Week Ten</u>
Mon, March 6:   Chapter 21 - Chi-Square Test for Qualitative Data

Wed, March 8:   Chapter 21 - Chi-Square Test for Qualitative Data
                Chapter 23 - Postscript: Which Test?
                              Homework 7 due - Class time

Fri, March 10: Review
                Course Evaluation

<u>Finals Week</u>

Final Examination: March 17, 1995 @ 10:15 am