

SOCIOLOGY 476

Monday, Wednesday, Friday
2:30 p.m. – 3:20 p.m.

Location:
KUY310

LAB: M 3:30 – 4:20 p.m.
Room – Saunders 342

Instructor: D. William Wood
Saunders 247
X 6-7693
Email: dwwood@hawaii.edu

Teaching Assistant Ramonosita Logan
X6-7693
Email: rlogan@hawaii.edu

Office Hours: Prof. Wood - by appointment
Ms. Logan - by appointment

CRN SOC476: **82525**

CRN SOC476L: **82526**

Sociology 476

PURPOSE

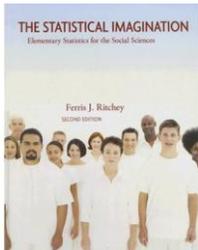
The purpose of this writing intensive course is to introduce students to statistics as a tool that can be used to strengthen their ability to read scientific journals, to prepare the students for more advanced statistics classes, and to allow the student to undertake research knowing that the data collected will be able to be reduced, interpreted and understood. The class is not a final statistics course for most graduate students since their programs usually require more than one course. It likely will be a terminal course for undergraduate students.

The course will introduce the student to common statistical procedures emphasizing univariate and bivariate description; some attention to multivariate techniques and statistical inference will also be included, within the context of research procedures.

A one-hour required laboratory in the use of SPSS* is also offered. This lab will introduce the student to analysis of data using a statistical package and will involve data entry, data cleaning, simple analysis and complex analysis of data. The versions of SPSS that can be prepackaged with your text are for a PC environment. If you use a MAC, a version of SPSS will be available on computers in the lab.

* Statistical Package for the Social Sciences

TEXT:



**The Statistical Imagination, 2nd Edition. Ferris J. Ritchey,
University of Alabama at Birmingham**
©2008, ISBN-13 9780073331607

Contents	
Chapter 1.	The Statistical Imagination
Chapter 2.	Organizing Data to Minimize Statistical Error
Chapter 3.	Charts and Graphs: A Picture Says A Thousand Words
Chapter 4.	Measuring Averages
Chapter 5.	Measuring Dispersion or Spread in a Distribution of Scores
Chapter 6.	Probability Theory and the Normal Probability Distribution
Chapter 7.	Using Probability Theory to Produce Sampling Distributions
Chapter 8.	Parameter Estimation Using Confidence Intervals
Chapter 9.	Hypothesis Testing I: The Six Steps of Statistical Inference
Chapter 10.	Hypothesis Testing II: Single Sample Hypothesis Tests: Establishing the Representativeness of Samples
Chapter 11.	Bivariate Relationships: T-Test for Comparing the Means of Two Groups
Chapter 12.	Analysis of Variance: Differences Among Means of Three or More Groups
Chapter 13.	Nominal Variables: The Chi-Square and Binomial Distributions
Chapter 14.	Correlation and Regression Part 1: Concepts and Calculations
Chapter 15.	Correlation and Regression Part 2: Hypothesis Testing and Aspects of a Relationship
Chapter 16.	Rank Order Correlation Between Two Ordinal Variables
	Appendices
Appendix A	Review of Basic Mathematical Operations
Appendix B	Statistical Probability Tables
Appendix C	Answers to Selected Chapter Exercises
Appendix D	Guide to SPSS for Windows

Sociology 476

DETAILS OF GRADING

You will have a total of approximately 22 short writing assignments that will be completed in class, 3 homework assignments of at least 3 pages each, one abstract of one page, and a 10 page paper. In addition, you will complete 10 outputs from real data in the SPSS Lab that will support the homework assignments.

For the class, grades will be assigned as follows:

Short Writing Assignments	90 (3 points each)
Homework Assignments	5 points for the abstract of the final paper
Participation	45 points for the 3-page papers (15 points each)
Total Possible Points	10 points for participation
	150

Late assignments will be counted as completed but penalized 50% of their point assignment

Conversion of Points to Letter Grade

	<i>Base of range</i>	<i>PCT %</i>
A+	144.6	96.4
A	138.6	92.4
A-	135.6	90.4
B+	129.6	86.4
B	123.6	82.4
B-	120.6	80.4
C+	114.6	76.4
C	108.6	72.4
C-	105.6	70.4
D+	99.6	66.4
D	93.6	62.4
D-	90.6	60.4
F	below 90 points	

Sociology 476

Syllabus:

Week of	Session	Content	Readings
20130107	1-3	Introduction to course, text, and lab	None
20130114	4-6	Review of arithmetic and mathematic principles	Appendix A
20130121	7-9	Martin Luther King Day Monday – no class	Appendix A
20130128	10-12	End of Review of number stuff	
20130204	13-15	Review of social theory and methods	Chapters 2-5
20130211	16-18	Our first couple of statistics – hold on tight	Chapter 11
20130218	19-21	So, that wasn't so bad- let's try a few more	Chapter
20130225	22-24	A little more of a reach –multivariate statistics	Chapters 14-15
20130304	25-27	Sorry, just a bit more	Chapter 5
20130311	28-30	Argh, probability–good thing Spring break is almost here	Chapter 6
20130318	31-33	Anyone headed for Vegas?	Chapters 8-10
20130325	34-36	SPRING RECESS NO CLASSES	
20130401	37-39	Good Break? More probability	Chapters 8-10
20130408	40-42	Testing differences	Chapters 11-13
20130415	43-45	Using Statistics in Research	
20130422	46-48	Data, Information, and intelligence	
20130429	49-51	Presenting Data	Chapter 3
20130506	52-54	So, now what?	

Date	No.	Homework to be turned in
01/28/13	1	3-page paper on how we think about data and their use in the media
02/04/13	2	3-page paper interpreting data regarding your dataset 1 and the population
03/04/13	3	3-page paper on a topic from an assigned dataset (dataset2)
04/08/13	4	1-page abstract of Final Paper
05/01/13	5	10-page paper on a data supported topic of your choice (dataset 3)

DETAILS OF MAJOR ASSIGNMENTS

Assignment 1: A three page paper on how we think about data and their use in the media. This assignment is to allow you an opportunity to express your opinions regarding the media and the way it uses data in articles and reports. To what extent are the data made to fit the storyline or is it that the storyline fits the data? Do reporters take care to be sure their readers understand the data being used, the degree of reliability in the data being presented, or the extent to which the data presented appear to be valid? **DUE DATE**
Submit electronically by midnight January 28, 2013.

Assignment 2: A three -page paper interpreting data regarding the medical personnel and the population. Using the data base you have assembled in the lab, discuss your analysis of the medical personnel of Hawaii, especially looking at the rates of specific medical personnel per 100,000 population (e.g., physicians per 100,000 population) and the proportion of population served by each specific medical group (e.g., number of people

Sociology 476

per dentist). From what you see in the data, is the situation with respect to the medical professions getting better or worse? Is it the same for all groups? Has there been any change in these ratios over time? **DUE DATE:** Submit the paper and the SPSS system file electronically by midnight February 4, 2013 .

Assignment 3: A three page paper on a topic from an assigned database. Using a database assigned in the lab, identify several (at least 8) variables of interest and discuss these data in the context of the topic related to these variables (e.g., race and gender equity in school completion). You need to use the statistics that are appropriate to the data you are analyzing. Your paper should discuss the topic in general and then focus on the data you have to analyze drawing appropriate conclusions from your analyses. The use of charts and graphs is fine but they do not count as part of the three pages, meaning you can use as many or as few as you want or need in order to support your findings. **DUE DATE:** Submit the paper and the working system file (containing only the variables you used in the analyses) by midnight March 4, 2013.

Assignment 4: A one page abstract of your Final Paper. With an awareness of the database you will use for your final paper, prepare a one-page abstract describing what your topic is, where the data will come from, and what sorts of literature you will use to support your analyses and findings. **DUE DATE:** Submit the abstract electronically by midnight April 8, 2013.

Assignment 5: A ten page paper on a data supported topic of your choice. Using a topic of interest to you and a database chosen by you, prepare an analytic report of your findings supported by a brief review (2-3 pages) of literature related to the topic, and using no fewer than 10 variables from the database you chose. You need to use the statistics that are appropriate to the data you are analyzing. You may use as many or as few charts and graphs as you need to express your findings but they do not count as part of the 10 pages. **DUE DATE:** Submit your paper and the supporting SPSS system file containing only the variables you used by midnight May 1, 2013

NOTE: ALL SUBMISSIONS OF PAPERS AND DATABASES ARE TO BE SENT TO:

Professor Wood at dwwood@hawaii.edu

and

Ms. Logan at rlogan@hawaii.edu

DETAILS OF DAILY ASSIGNMENTS FOR WEEKS 1 – 10:

Each day you will come to class and will have a single page handed to you. You will have 10 minutes total time for this assignment. On one side of the page will be a short news article that in some way relates to statistics. Having read the article, turn the page over and write your name on the upper right hand corner of the page. You have the rest of the page available to write me a comment, reaction, response, or target memo about the article. What did you think of it? What should be done about this? Why do you or do you not agree with the article. Write so I can read it. When the 10 minute total is up, papers will be collected and you will then get ready for the

Sociology 476

day's topic in statistics. The papers will be annotated and returned within two classes. This will count a total of 85/250 of your final grade. Only 25 of the 29 will be counted towards the grade and if all 29 are turned in, a 5 point bonus will be included in you points.

YOUR RESUME

Since many of you will be on the job market on leaving this course, or shortly after that, you will turn in your resume to me no later than April 1, 2008. I will review the resume and make suggestions for changes so that you are able to go seeking work before the end of the term. For those not in that situation, the assignment will still apply and you will be able to use the resume for campus jobs, etc. No direct grade is assigned to the content of the resume but 50% of the student participation grade will be related to the turning in of the resume ON TIME!