QBA 260 -- Fall, 2003

Section 1: Wentworth 1, MW 10:00-10:50 and UCB 105, F 10:00-10:50
Section 2: Wentworth 1, MW 10:00-10:50 and UCB 105, W 6:30-7:20

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Phone: 974-7767 Office hours: MW 11:00-12:00, MW 3:00-4:30
Web Page: http://www.uhh.hawaii.edu/~hennesse

This is a class in introductory business statistics. Its main objective is to allow you to develop a clear understanding of basic statistical analysis tools that are of use to managers in both the private and public sectors of the world's economy. This class will emphasize the practical application of a commonly available tool, the computerized spreadsheet, for the solution of basic statistical analysis problems.

The class will cover a variety of topics, with the focus principally on the choice of appropriate analytical tools to fit situations of managerial interest. To that end, students will be given the opportunity to become familiar with both parametric and non-parametric statistical tools, and to understand the reasons for the choice of particular tools in the situations where they are appropriate.

The class will not emphasize statistical theory or manual calculation beyond that necessary for understanding the strengths and weaknesses of the various tools discussed. Analysis of actual data and the interpretation of the meaning of the results of the analysis will be the principal activities of the course.

Text: Brightman, Harvey J. (1999). Data Analysis in Plain English with Microsoft Excel. Duxbury Press: Pacific Grove, CA.

Computer: You MUST have access to a computer with Microsoft Excel or its functional equivalent loaded on it, and access to an Internet connection will be useful. All of the computer labs on campus have this software. If you do not already have a Library computer account, you should get one immediately. This will provide you access to all the software necessary for this course. You may, of course, use your own computer and Internet connection if you have them. However, I cannot guarantee that I can help you with problems if you use software other than Excel.

Schedule, examinations, and course administration:

We will follow the outline below and cover most of the chapters in the book, so we will need to move fairly quickly, but I do not want to go on until you are reasonably comfortable with the material. Each section builds on the last. The only thing I intend to grade is your ability to use the tools that we will learn in the class. So, the only graded exercises will be the seven lab exercises that are labeled as "Graded" in the course outline. I may offer "extra credit" problems from time to time that you can attempt if you want to improve your course grade.

Class will meet at the scheduled times. Your attendance is expected at all classes, and absences will be noted. Please be on time for class every day. It is a courtesy that your fellow class members are entitled to.

The only way to master this material is by working as many problems as you can. I have listed a small set of problems for each day that are the minimum you should do. If you can't do

those problems after the day's class, PLEASE ASK FOR CLARIFICATION AT THE NEXT CLASS or email me a question. QUESTIONS ARE ALWAYS ENCOURAGED!
The class web page has a section where you may download a copy of some of the data files for the problems in the book, to avoid having to retype the data. This will save you a lot of time, and many errors. All of the answers are also posted on the website to allow you to check your own work.

Please make use of my office hours for help! That's what they are for. If you do not understand something, come by and see me, and I will do my best to make it clear for you. My purpose in teaching this class is to help you learn to use some very powerful and useful tools that will serve you well for a long time. That will require study and effort on your part, but I want to help you as much as I can. If you can't come during office hours, see me to make an appointment for another time. Please don't wait until you are completely lost!!!

Students with special needs. UHH is committed to providing equal access to the campus for students with disabilities. Any student with a documented disability who would like to request accommodations, should contact the University Disability Services Office at 933-0816 (V), or 933-3334 (TTY) Campus Center Room 311,as early in the semester as possible.

Pagers and Cell Phones: I admire technology as much as anyone, but I will not allow my classes to be disrupted by it. Please turn all pagers and cell phones OFF, or to SILENT while in my classes. You may NOT be excused to take calls during class.

Final Exam: The final exam for this class will be optional. It will be comprehensive, over all of the material covered in the class, and may be taken if you wish to try to improve on your lab average. The final course grade will be based on the HIGHER of the final exam grade and the lab average, for those who take the final exam.

Grading:

Here is how I plan to weight the things I will grade.		I intend to assign final grades based upon the following scale			
Seven graded labs	90%	95 - 100%	A	77 - 79.99%	C+
Attendance and participation	10%	90 - 94.99%	A-	73 - 76.99%	C
Total	100%	87 - 89.99%	B+	70 - 72.99%	C-
		83 - 86.99%	B	60 - 69.99%	D
		80 - 82.99%	B-	< 60%	F

Course Schedule

Wk	Date	Day	QBA 260 -- Class topic	Reading Assignment	Problems after class
1	25-Aug	Monday	Class introduction, Excel		
	27-Aug	Wednesday	Variation and Scales of Measurement	Chapter 1	1, 8, 21
		Lab	*Lab orientation, data entry, basic Excel procedures for data analysis*		
2	1-Sep	Monday	Labor Day Holiday		
	3-Sep	Wednesday	Cross-sectional data	Chapter 2	1 thru 9
		Lab	*Histogram, pivot Table, univariate descriptive statistics, boxplot*		
3	8-Sep	Monday	Cross-sectional data	Chapter 2	16, 19, 26
	10-Sep	Wednesday	Time-ordered data	Chapter 2	20, 27
		Lab	***Graded:*** *Univariate descriptive statistics, boxplot, time-series plot*		

Wk	Date	Day	QBA 260 -- Class topic	Reading Assignment	Problems after class
4	15-Sep	Monday	Sampling distributions	Chapter 4	1 thru 8, 12
	17-Sep	Wednesday	The Normal distribution	Chapter 4	13, 30
		Lab	*Sampling, the standard error of the mean*		
5	22-Sep	Monday	Distribution of the proportion and variance	Chapter 4	19, 36
	24-Sep	Wednesday	Statistical inference and the idea of a confidence interval	Chapter 5	3 thru 9
		Lab	***Graded:*** *Variation and standard errors*		
6	29-Sep	Monday	Confidence intervals on unknown population parameters	Chapter 5	11, 13, 34
	1-Oct	Wednesday	Confidence intervals on unknown population parameters	Chapter 5	19, 30, 50
		Lab	*Confidence intervals* (SHRM Thought Leaders Conference - Chicago)		
7	6-Oct	Monday	Hypothesis testing on one population parameter	Chapter 6	1 thru 9
	8-Oct	Wednesday	Hypothesis testing on one population parameter	Chapter 6	12, 18, 20
		Lab	***Graded:*** *Confidence intervals*		
8	13-Oct	Monday	Hypothesis testing on one population parameter	Chapter 6	22, 27, 30
	15-Oct	Wednesday	Describing multivariate cross-sectional data	Chapter 7	1 thru 11
		Lab	***Graded:*** *One-parameter hypothesis testing*		
9	20-Oct	Monday	Describing multivariate time-ordered data	Chapter 7	12, 14, 19
	22-Oct	Wednesday	Correlation and cross-correlation	Chapter 7	24, 26
		Lab	*Multivariate data and time-ordered data*		
10	27-Oct	Monday	Hypothesis testing on two population parameters	Chapter 8	1 thru 8
	29-Oct	Wednesday	Hypothesis testing on two population parameters - equal and unequal variances	Chapter 8	19, 20, 27
		Lab	*Two-parameter hypothesis testing*		
11	3-Nov	Monday	Hypothesis testing on two population parameters - paired samples	Chapter 8	15, 18
	5-Nov	Wednesday	Testing for the equality of variances in independent populations	Chapter 8	31
		Lab	***Graded:*** *Two-parameter hypothesis testing*		
12	10-Nov	Monday	Regression analysis - scatter diagramming and basics	Chapter 9	
	12-Nov	Wednesday	Regression analysis - ANOVA and explained variance	Chapter 9	
		Lab	*Regression* (SHRM Leadership Conference - Alexandria)		
13	17-Nov	Monday	Regression analysis - diagnostics	Chapter 9	
	19-Nov	Wednesday	Regression analysis - prediction	Chapter 9	
		Lab	***Graded:*** *Regression*		
14	24-Nov	Monday	Forecasting - meandering patterns	Chapter 10	
	26-Nov	Wednesday	Forecasting - meandering patterns	Chapter 10	
		Lab	Thanksgiving Holiday		
15	1-Dec	Monday	Forecasting - seasonal patterns	Chapter 10	
	3-Dec	Wednesday	Design of experiments	Chapter 12	
		Lab	***Graded:*** *Forecasting*		
16	8-Dec	Monday	One-way analysis	Chapter 12	
	10-Dec	Wednesday	Two-way analysis and multiple comparisons	Chapter 12	
17	15-Dec	Monday	Final Exam Period 2:00 - 4:00		