

# STAT 3360-502 COURSE SYLLABUS

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Office Hours: Wednesday, 5:30 - 7:00 p.m., else by appointment

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Text: Statistics for Management and Economics, Abbreviated 6<sup>th</sup> Ed.

Authors: Keller and Warrack

Lectures: Wednesday, 7:00 - 9:45 p.m., JO 3.516

Class Schedule: The class schedule is tentative and the dates of the exams are subject to change, depending upon our progress in covering the material.

<u>Date</u>	<u>Text Sections</u>	<u>Topic</u>
August 24	Ch.1	What is Statistics?
	2.1-2.6	Graphical Descriptive Techniques
August 31*	4.1-4.7	Numerical Descriptive Techniques
Sept. 7*	2.5, 17.1-17.5	Simple Linear Regression and Correlation
Sept. 14*	17.7 – 17.9	Simple Linear Regression and Correlation (con.)
	5.1-5.5	Data Collection and Sampling
<b>Sept 21</b>		<b>Exam 1</b>
Sept. 28	6.1-6.6	Probability
Oct. 5*	7.1-7.7	Random Variables and Discrete Probability Distributions
Oct 12*	8.1-8.3	Continuous Random Variables
	9.1-9.3	Sampling Distributions
Oct. 19*	10.1-10.5	Introduction to Estimation
Oct 26*	11.1-11.6	Introduction to Hypothesis Testing
<b>Nov. 2</b>		<b>Exam 2</b>
Nov. 9	12.1-12.6	Inference about a Single Population
Nov. 16*	13.1 – 13.4	Inference about Comparing Two Populations
	Ch 14	Review of Chapters 11 and 12
Nov. 23	16.1-16.4	Analysis of Qualitative Data
		Course Review
<b>Nov. 30</b>		<b>Final Exam</b>

Grade: There will be two 2-hour mid-term exams and a Final Exam. The mid-term exams will be over the material just covered. They will be closed book, although you will be allowed an 8½ by 11-inch study sheet for formulas and notes. The Final Exam will be comprehensive and open book. Individuals with conflicts due to travel may take exams before the scheduled date, but not after. Missed exams will be assigned a grade of 0 if the absence is unexcused. Otherwise, the final exam grade will serve as that test grade. In addition, if neither of the mid-term exams have been missed, the Final Exam grade will replace the lower test grade if it will improve your overall average. There will be 8 short (15-min.) closed-book quizzes at the beginning of class covering the material covered in the previous week. The classes with quizzes are noted in the class schedule. Your quiz average will be calculated from the 5 highest quiz scores. You are responsible for the material covered during the lectures, some of which may not be in the textbook. The final course grade will be based upon a weighted average of the mid-term exams, the Quiz Average and the Final exam. The weights are:

Exam 1	25%
Exam 2	25%
Quiz Average	10%
Final Exam	40%

The final grade assignments will be based upon the class distribution of the grade averages, with 90+ guaranteed an A, 80-89 guaranteed at least a B, 70-79 guaranteed at least a C, and 60-69 guaranteed at least a D.

Exercises: A significant aid in learning in any mathematical science is doing as many exercises (problems) as possible. For this purpose, a list of selected exercises from the text will be provided. The exercises will contain problems that are similar to the types of problems you will be expected to work on the exams. You can check your work on these exercises by the answers in the back of the text and by consultation with the Teaching Assistant or myself.

#### Calculators &

Computers: In order to emphasize the computational methodology and to meet the practical limitations of the classroom, the problems done in class and on the exams will be small enough to be done by hand using a hand calculator. It is therefore recommended that you have, and learn how to use, a calculator which can do at least 1-variable statistics (mean and standard deviation), with 2-variable statistics (correlation and regression) being an added plus. For most real-world situations, where you may be called on to apply the methods learned in this course, the amount of data will usually preclude doing the calculations on a hand calculator. In those cases, using statistical analysis software on a computer will be the recommended approach. The Student Edition of Minitab is an excellent software package, easy to use, while very powerful. Another option is to use the statistical analysis tools included in Microsoft Excel. Outputs from various statistical packages, including Minitab and Excel, are illustrated in the text. If you use the UTD Microcomputer Center's computers and software, you will find Excel there, but not Minitab. If you already are familiar with and are using some other reasonably good software for statistical computations, by all means continue to use it. Regardless, it is highly recommended that you learn to use a computer to do the calculations by using it to do some of the exercises.