Instructor: Dr. Boxin Tang

Prerequisite:

STAT 270 & MATH 232 (can be a corequisite). This course may not be taken for credit by students who have credit for STAT 330 prior to the Fall 03-3 semester.

Textbook:

Probability and Statistics for Engineering and the Sciences, 7th ed., by Jay L. Devore, Publisher: Duxbury Press

Calendar Description:

This course is a continuation of STAT 270. Review of probability models; procedures for statistical inference from survey results and experimental data. Statistical model building. Elementary design of experiments and regression methods. Introduction to lifetime analysis. Introduction to time series. Introduction to stochastic processes. **Quantitative**

Outline:

1. Review of STAT 270 material and relationship to this course
2. Statistical Models
3. Parameter estimation - least squares and likelihood methods
4. Hypothesis tests
5. Introduction to Regression Analysis - simple and multiple
6. Analysis of Variance
7. Introduction to lifetime analysis
8. Introduction to time series: ARIMA models, estimation, forecasting, confidence interval

Grading Scheme:

Assignments – 20%
Midterm 1 – 20%
Midterm 2 – 20%
Final – 40%

Students should be aware that they have certain rights to confidentiality concerning the return of course papers and the posting of marks. Please pay careful attention to the options discussed in class at the beginning of the semester. Students are reminded that Academic Honesty is a cornerstone of the acquisition of knowledge. Scholarly integrity is required of all members of the University. Please consult the General Guidelines of the calendar for more details.

Revised January 2008