STATISTICS 270-3 INTRODUCTION TO PROBABILITY AND STATISTICS

Fall 2004 DAY COURSE

Instructor: Dr. T. SWARTZ Lab Instructor: R. INSLEY

Prerequisites:

 $\underline{MATH\ 152}$ or $\underline{MATH\ 155}$ or $\underline{MATH\ 158}$ must precede or betaken concurrently. Students with credit for $\underline{MATH\ 371}$ or $\underline{MATH\ 272}$ may not take STAT 270 for further credit.

Textbook:

Probability and Statistics for Engineering and the Sciences (6thed) by J. Devore, Duxbury publishers.

Calendar Description:

Basic laws of probability, sample distributions. Introduction to statistical applications.

Outline:

- 1. Introduction to descriptive statistics and chance phenomena.
- 2. Elementary probability rules, basic combinatorial formulae, conditional probability, independence, and Bayes' theorem.
- 3. Binomial, hypergeometric, and Poisson distributions.
- 4. Expectation and variance.
- 5. Continuous distributions, uniform, e