Math 5305  Statistical Methods

Instructor:         D.L. Hawkins, PhD  (486 Pickard Hall, 817-272-3261, hawkins@uta.edu)
Time:               TTh 9:30-10:50am
Prerequisites:      Basic algebra and a willingness to learn concepts
Optional Texts:     Statistics for Experimenters by Box, Hunter and Hunter
                    Intro. to the Practice of Statistics by D. Moore

Note set:  required by second class day;  pick up at UTA Bookstore
           (cost: about $15.00)

TOPICS:

1.  Descriptive statistics, numeracy and statistical report writing
2.  Basic probability and sampling theory
3.  Experimental design and analysis (randomization, blocking, ANOVA’s,
    factorials, etc. for normal and categorical data)
4.  Basic nonparametric statistics

COMPUTING OPTIONS

1.  Use SAS in one of the campus pc labs
2.  Lease your own copy of SAS (contact John Connoly)
3.  Use your own package (SPSS, SYSTAT, etc), but check with me first

GRADING

Homework           25%
Probability Test  10%
Projects (3)          35%
Final Exam          30%

GENERAL DESCRIPTION:

The course is oriented toward learning to handle data – from collection to
description to formal inference.  The SAS/WINDOWS package will be used
for class illustration, but any high-quality PC statistics package (e.g. SPSS,
NCS, STATISTICA, SYSTAT) will suffice.  I will teach the SAS/WINDOWS
operating system outside of class; no prior experience with computers is necessary.
The course is solid training in basic statistical methods, and provides a firm
foundation for further graduate work in statistics.