COURSE SYLLABUS
FOR
SOFTWARE FOR THE STATISTICAL SCIENCES
STA 511

TITLE: Software for the Statistical Sciences

INSTRUCTOR: Dr. Cecil Hallum

OFFICE: LDB 420C   **OFFICE HOURS:** 10:00-11:00 MW
                                              9:30--11:00 TTh
                                              2:00-3:00 MW
                                              & by Appointment
PHONE: 294-3706

TEXT: Handouts, individual software help menus and information from the WEB.

DESCRIPTION: This course is for one-hour credit and introduces the student to a number of additional statistics and math software packages not typically covered in standard coursework. A key purpose is to better prepare the student for a work environment that may be characterized by having one or more of these packages as the primary source for statistical and mathematical manipulations. This coverage includes a significant look at key aspects of each package including not only the standard mathematical and statistical analytical manipulations but also including plotting, symbolic manipulations and also scientific word processing. Particular packages to be covered include SPSS, Maple X, MathPro Explorer, MatLab, Mathematica and Scientific Workplace. Other software packages such as SAS, MINITAB and Microsoft Word are a part of other coursework and will be discussed in a comparative manner. The student will also be made aware of numerous WEB links that are especially beneficial for statistical insight and manipulations.

OBJECTIVE: To develop an understanding of and a facility for performing statistical scientific computing and related manipulations using canned software packages and the WEB.

APPROACH:

1. Assigned problems for experience and familiarity with techniques.

2. In-office discussions on applications --- appropriate usage and value.

3. List checkoff of items as they are completed; in-office demonstration of mastery of covered items. Also, a notebook is to be turned in at the end of the semester containing a printout of all assignments.

APPRAISAL:

> **Intermittent Demonstrations…………80%**
> **End-of-semester Demonstration……..20%**

SPECIAL NOTE: The student MUST stay current in all assignments (report periods will occur weekly).

POLICIES:

1. **Withdrawal --- University policy will be followed: the last day for drop/withdrawal is October 10, 2007. It is <u>your personal responsibility</u> to initiate and complete the drop/withdrawal process.**

2. **Homework --- The student MUST stay current in all assignments (report periods will occur weekly).**

3. **Incomplete --- A grade of "X" or "Incomplete" is not appropriate for this course.**

4. **Attendance --- All work will be done out-of-class; results of this work will be demonstrated on the instructor's PC or at another convenient location where a machine and the software is available.**

5. **Academic Honesty --- All work that is demonstrated to the instructor is to reflect solely your individual achievements.**