COURSE SYLLABUS

FOR

REGRESSION MODELING AND ANALYSIS STA 474-01 – FALL 2007

CLASSROOM LOCATION: CFS 101 - MEETING TIME 8:00-9:20 TTh

TITLE: Regression Modeling and Analysis

INSTRUCTOR: Dr. Cecil Hallum

OFFICE: LDB 420C OFFICE HOURS: 10:00-11:00 MW

2:00-3:00 MW 9:30-11:00 TTh

PHONE: 294-3706 & by appointment.

<u>TEXT</u>: Regression Analysis: Statistical Modeling of a Response Variable, Second Edition, by Rudolf J. Freund, William J. Wilson and Ping Sa, Academic Press, 2006.

<u>DESCRIPTION</u>: This course covers the fundamentals of the concepts and applications of multiple linear regression. The coverage includes simple linear regression multiple regression, problems with observations, multicollinearity, diagnostics and remedial measures, simultaneous inferences, matrix linear regression, multiple linear regression, and regression models for quantitative and qualitative predictors.

OBJECTIVE: To develop an understanding of the concepts and applications of applied regression and modeling analysis.

APPROACH:

- 1. Lectures on new concepts and applications.
- 2. Assigned problems for experience and familiarity with techniques.
- 3. Classroom discussions on applications --- appropriate usage and value.
- 4. Examinations to demonstrate understanding and ability to utilize methods.

APPRAISAL:

Exam I	30%
Exam II	30%
Final Exam	25%
Homework	15%
TOTAL	100%

<u>SPECIAL NOTE</u>: Performance on exams is directly related to homework performance --- all homework is to be kept current, neatly together, in sequence, and ready to be handed in at the designated times.

POLICIES:

- 1. Make-up Exams --- DO NOT MISS AN EXAM!! Make-up exams are to be avoided; however, if you miss an exam (and have a authentic excuse -- i.e., a doctor's or other professional's written excuse), a day will be set aside at the end of the semester for all make-ups.
- 2. Withdrawal --- University policy will be followed: the last day for drop/with-drawal is October 10, 2007. It is <u>your personal responsibility</u> to initiate and complete the drop/withdrawal process.
- 3. Homework --- Since topics in the course sequence build upon preceding topics, it is expected that you will remain current in all assignments; also you should have your homework neatly assembled together at all times and be ready to hand it in upon request.
- 4. Incomplete --- A grade of "X" or "Incomplete" is not appropriate for this course.
- 5. Attendance --- Since lectures and in-class discussions are for your benefit, you are expected to be in attendance at all classes.
- 6. Class Behavior --- Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Cellular telephones and pagers must be turned off before class begins. Students are prohibited from eating in class, using tobacco products, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy.
- 7. Academic Honesty --- All work that is handed in for evaluation is to reflect solely your individual performance. All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

COURSE SEQUENCE

Week 1: Chapter 1

Week 2: Chapter 2: Sections 2.1 - 2.5

Week 3: Chapter 2: Sections 2.6 -- 2.10

Week 4: Chapter 3

Week 5: Chapter 4: Sections 4.1 – 4.3

Week 6: Wrap-up of Chapter 4 and Exam 1

Week 7: Chapter 5: Sections 5.1 - 5.3

Week 8: Chapter 5: Sections 5.4 - 5.5

Week 9: Chapter 6: Sections 6.1 - 6.3

Week 10: Chapter 6: Sections 6.4 – 6.5

Week 11: Chapter 6: Sections 6.6 – 6.9

Week 12: Review and Exam 2

Week 13: Chapter 7

Week 14: Chapter 8

Week 15: Chapter 9

Week 16: Chapter 10

Week 17: Review and Final Exam

HAVE A FANTASTIC SEMESTER!!