OFFICIAL SYLLABUS

STAT 482 – REGRESSION ANALYSIS

(Adopted Spring 2004; modified Fall 2009 – 4th edition)

Catalog Description: Inference in simple, multiple, polynomial and non-linear regression. Stepwise regression, subset selection; residual analysis, transformations and diagnostics. Prerequisite: Stat 380 or Stat480a,b, or consent of instructor.

Textbook: Applied Linear Regression Models, 4th Edition, by Neter, J. , Kutner, M., Nachtsheim, C., and Wasserman, W.

Course Outline and Topics

Chapter 1 – Linear Regression with One Predictor Variable

Chapter 2 – Inferences in Regression Analysis

Chapter 3 – Diagnostics and Remedial Measures

Chapter 4 – Simultaneous Inferences and Other Topics in Regression Analysis

Chapter 5 – Matrix Approach to Simple Linear Regression Analysis (Optional since the topics can be integrated in Chapter 6)

Chapter 6 – Multiple Regression - I

Chapter 7 – Multiple Regression - II

Chapter 8 – Building the Regression Model I: Selection of Predictor Variables

Chapter 9 – Building the Regression Model II: Diagnostics

Chapter 11 – Qualitative Predictor Variables

Any instructor should cover all of the material specified, additional sections are optional.