MAT 654: Linear Models (Fall, 2015) Course Information

<u>Instructor</u>: Professor H. Hyune-Ju Kim Carnegie 304E

443-1494, 443-1471(message)

hjkim@syr.edu

Office Hours: M 11-noon, T 1 p.m.-2 p.m.

<u>Course Description</u>: The course will discuss general procedures of estimation and hypothesis testing for linear models, especially simple and multiple regression models and analysis of variances models. The assumptions underlying the linear models of our interest and various methods of testing the validity of these assumptions will be considered. Also, applications will be discussed.

Text: Linear Regression Analysis, Seber and Lee, 2nd edition, Wiley

References: Draper and smith, Applied Regression Analysis, Third Edition

Searle, Linear Models

Prerequisite: Mathematical Statistics in the level of MAT 521 and 525 or higher,

Linear Algebra,

Knowledge of one of the statistical packages (such as MINITAB, SAS, SPSS)

Grading Policy

Homework (30 %), Midterm Exam (25 %), Project (15 %), Final Exam (30 %)

Exams: Midterm (in Class): October 19, 2015(Monday)

Final exam: December 14, 2015 (Monday) 12:45 p.m.-2:45 p.m.

There will be no make-ups for any reason. If you miss the midterm exam for a valid reason with supporting documents, the final will count correspondingly more.

<u>Homework</u>: Homework will be assigned and collected in class. You are encouraged to discuss homework problems with your classmates, but each of you are expected to write up your solutions independently.

Project: Students will conduct research and/or survey by applying and extending what he/she learned in class. Project will be evaluated based upon originality, creativity, completeness, and the quality of the written report and presentation. During the last two classes of the semester, each student will present his/her project.

<u>Students with Disabilities</u>: If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), http://disabilityservices.syr.edu, located in Room 303 of 804 University Avenue, or call 315-443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. You are also welcome to contact me privately to discuss your academic needs although I cannot arrange for disability-related accommodations.

Academic Integrity: The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the Policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort. For more information and the complete policy, see http://academicintegrity.syr.edu

Religious observances policy: SU religious observances policy recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to are religious observance provided they notify their instructors before the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice (Student Services -> Enrollment -> My Religious Observances) from the first day of class until the end of the second week of class.