INSTRUCTOR: Kang Ling James

OFFICE: Solon Campus Center 158, Phone: 726-6241

OFFICE HOURS: MW 3:00-4:00, Th 1:00-3:00, F 10:30-11:30, or by appointment.

LECTURES: MW 12:00-12:50, Engr 177

TEACHING ASSISTANT: Brad Jannsen

LABORATORY: F 12:00-12:50, MonH 209 — Brad Jannsen

The main objectives of the lab are to learn the statistical software SAS and to discuss homework problems. One lecture will be dedicated to reviewing the prerequisites.


PREREQUISITE: Stat 3611 and Math 2326 or 3280 or Math 4326

COURSE TOPICS: Chapters 1 - 7 and 9 of the textbook, plus selected topics in Chapter 10,11,12, if time permits. The main topics are:
(1) Simple linear regression: Least squares estimates, confidence intervals, hypothesis testing for the slope and intercept, prediction of new observations, coefficient of determination, correlation.
(2) Multiple linear regression.
(3) Residual analysis, detection and treatment of outliers, transformations, weighted least squares estimates.
(4) Polynomial regression.
(5) Variable selection and model building.
(6) Selected topics in robust regression.

GRADING: Midterms (2) 40% (20% each)
Final exam 30%
Assignments 20%
Group project 10%

EXAMS: There will be two midterm exams and a cumulative final. The first exam will be on Monday, February 26; the second will be on Wednesday, April 11. The final exam is scheduled for Monday, May 7 at 12:00 - 1:55. All exams are in Engr 177.

ASSIGNMENTS: There will be written homework assignments which will be graded. Make every effort to hand in homework on time; late homework will only be

SPECIAL NEEDS: Individuals who have any disability, either permanent or temporary, which might affect their performance in this course are encouraged to inform me at the beginning of the semester. Adaptation of methods, materials, or testing may be arranged in order to facilitate learning.