Instructor: Chae Young Lim (C426 Wells Hall, 353-7154, lim@stt.msu.edu)
Prerequisite: STT 867
Time and Place: M W F 9:10–10:00pm, C506 Wells Hall
Office hour: M W 12:00pm-1:00pm, or by appointment
Class Website: go to d2l.msu.edu

Description of the Course
The course provides students with a sound background in the theory and application of mixed models. More specifically, this course covers various modeling, inference and statistical properties of linear mixed models (LME) as well as generalized linear mixed models (GLMM) which includes maximum likelihood estimation, quasi-likelihood estimation and generalized estimating equations, etc. Also, this course covers other estimation methods, prediction of LME models, nonlinear mixed models, Bayesian development of LME and GLMM.

Tentative textbook chapters will be covered:
Chapter 1 Introduction
Chapter 2 One-way classifications
Chapter 3 Single-predictor regression
Chapter 6 Linear mixed models
Chapter 7 Generalized linear mixed models
Chapter 8 Models for longitudinal data
Chapter 13 Prediction
Chapter 14 Computation

Note that we may not follow the same order as in the textbook.

Attendance
Students’ attendance will be checked randomly in class without any prior notice. Students will receive a total 10% credit for attendance.

Course Grade
The Final grade is determined by homeworks (30%) and two exams (60%) in addition to the attendance.
Remark
The instructor reserves the right to make any changes she deems academically advisable.

Important Dates for Spring Semester 2015

- Jan. 12 First day of classes; late enrollment fee begins
- Jan. 16 Close of online add period
- Jan. 19 No class- Martin Luther King Day
- Mar. 9-13 Spring Break
- May 1 Last Day of Classes
- May 4-8 Final exam week