STT 867  Linear Model Methodology  
Fall 2015

Time: M-W, 12:40-2:00pm  
Place: A328 Wells Hall

Instructor: Ping-Shou Zhong  
Office Hours: M-W, 3:00-4:00pm at C418 Wells Hall and by appointment  
E-mail: pszhong@stt.msu.edu

Website: STT department->Academics->Class Pages List->STT867

Textbook:  

References:  

Graybill, F. A (1976), *Theory and Application of the Linear Model*.


Prerequisite: STT 863-864, STT 861-862.

Course description: This is an advanced course in linear models especially on theories. Important theories in linear models will be introduced in this course, which includes classical estimation and statistical inference theory. The topics include: Properties of multivariate normal distribution, Cochran's theorem, Simple and multiple linear regression models, Gauss-Markov Theorem, BLUP, one-way and two-way ANOVA models, estimation of variance components and related problems.

Homework of various types will be assigned and will be due on Wednesday in class. Copies of solution will be posted on the class page website or distributed in class. Students should write his or her own assignment independently, do not copy what someone else has written although discussion with your fellow students is encouraged.

Your final score will be based on homework, one middle term exam and final exams. The percentages of each part to the final score are listed below:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>35%</td>
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<tr>
<td>Mid-Term Exam</td>
<td>30%</td>
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<tr>
<td>Final Exam</td>
<td>35%</td>
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Homework is due on Wednesday, Oct. 21, in class. Final Exam is on Tuesday, Dec. 17, 12:45-2:45pm.

No late homework are accepted unless earlier notification. No make-up exams except emergency.
Important dates:

September 2, 2015      First Day of Classes
September 7, 2015      Labor Day – Official Holiday/University Closed
September 9, 2015      Open adds end (8:00 pm)
September 28, 2015     Last day to drop with refund (8:00 pm)
October 21, 2015       Middle of Semester (Deadline to drop with no grade)
November 26 & 27       Thanksgiving Holiday
December 17, 2015      Final Exam (12:45-2:45pm)

Accommodations for students with disabilities: students with disabilities should contact the Resource Center for People with Disabilities at 517-884-RCPD or on the web at rcpd.msu.edu. If you are eligible for an accommodation, you will be issued a verified individual service accommodation (RISA) form. Please present this form to me at the start of the term or two weeks prior to the accommodation date.

Academic honesty: Department of Statistics and Probability adheres to the policies of academic honesty as specified in the General Student Regulations 1.0, Protection of Scholarship and Grades, and in the all-University of Integrity of Scholarship and Grades, which are included in Spartan Life: Student Handbook and Resource Guide. Students who plagiarize may receive a 0.0 on the assignment or fail the course, and will be reported to the Dean.

The instructor reserves the right to make any changes he deems academically advisable. Such changes, if any, will be announced in class. It is your responsibility to attend the class and keep track of the proceedings.