

DESIGN OF EXPERIMENTS
 16:960:590:01 SPRING 2014
 HLL 552, BC T 6:40 – 9:30 PM

Text (free online):
 A First Course in Design and
 Analysis of Experiments
 By Gary W. Oehlert,
 W.H. Freeman & Co., 2000
<http://www.stat.umn.edu/~gary/Book.html>

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SYLLABUS

Date	Chapter	Topic
Jan 21	1	Introduction and statistical software
Jan 28	2	Randomization and Design
Feb 4	3	Completely Randomized Design
Feb 11	4,5	CRD, Contrasts, Multiple Comparisons
Feb 18	1-4	First Exam (Chapters 1-4)
Feb 25	5,6,7	Multiple Comparisons and Checking Assumptions
Mar 4	8	Factorial Experiments
Mar 11	9,10	Factorial Experiments
Mar 18	--	<i>Recess</i>
Mar 25	5-10	Review, Second Exam 8-9:30 PM (Chapters 5-10)
Apr 1	11,12	Random Effects, Nesting, Mixed Effects, EMS
Apr 8	13,14	Complete Block and Incomplete Block Designs
Apr 15	15	Factorials and Confounding in 2^k and 3^k Experiments
Apr 22	18	Fractional Factorials: 2^{k-q} Experiments
Apr 29	16	Split-Plot Designs
May 13	1-16	Third Exam 8:00 to 11:00 PM (All Chapters)

Grades:	First Exam.....	30%
	Second Exam.....	30%
	Third Exam.....	40%
	Mean Homeworks...	5% (Extra Credit to be added to final score)

An exam will be excused under both of the following conditions:

- a) notification (written note or a phone call to the Department of Statistics) prior to the exam
- b) valid third party written explanation.

If this is the case, the final grade will be calculated based on the other exams (50% each).
 A missed exam has a zero score. There are no make-up exams.

DESIGN OF EXPERIMENTS. (CR.3.)

16:960:590:01 --- JAN 21 - MAY 13 --- T 6:40 - 9:30 PM --- HLL 552 Busch Campus Index# 01678

Fundamental principles of experimental design; completely randomized variance component designs, randomized blocks, latin squares, incomplete blocks, partially hierarchic mixed-model experiments, factorial experiments, fractional factorials, response surface exploration.

PREREQUISITES: Basic Statistics for Research 960:401, or Basic Applied Statistics 960:484 or permission of department.