STAT 430
Statistical Design and Analysis of Experiments

Fall 2013
Day Course

Students requiring accommodations as a result of disability must contact the Centre for Students with Disabilities 778-782-3112 or csdo@sfu.ca

Instructor: Dr. Steven Thompson

Prerequisite:

STAT 350 (or MATH 372)

Textbook:

Design of Experiments: Statistical Principles of Research Design and Analysis (2nd ed.) by Robert O. Kuehl. Publisher: Duxbury

Calendar Description:

An extension of the designs discussed in STAT 350 to include more than one blocking variable, incomplete block designs, fractional factorial designs, and response surface methods. **Quantitative.**

Outline:

1. Ideas in design and analysis of experiments.
2. Statistical and design concepts. Experiments, sampling, observational studies, natural experiments.
3. Completely randomized designs, single treatment factor.
4. Blocking in Experiments.
5. Factorial designs.
6. Response surface methodology, regression, exploratory experiments, sequence of experiments.

Grading Scheme:

Assignments 20%
Midterm – 30%
Final 50%
Grading is subject to change

Students should be aware that they have certain rights to confidentiality concerning the return of course papers and the posting of marks. Please pay careful attention to the options discussed in class at the beginning of the semester. Students are reminded that Academic Honesty is a cornerstone of the acquisition of knowledge. Scholarly integrity is required of all members of the University. Students are encouraged to review policies pertaining to academic integrity available on Student Services webpage at http://students.sfu.ca/academicintegrity.html

Students looking for a Tutor should send an email to stat@sfu.ca with "Tutor Request" in the subject line. Please only include information that you would like forwarded to our tutors mailing list.

Revised July 9, 2013