

STATISTICS 512, Fall 2007, MWF 10:00-10:50 am, Curtiss Hall, Room 013

• **Instructor:**

Prof. Max Morris, 304B Snedecor Hall
Phone 515-294-2775, FAX 515-294-5040, mmorris@iastate.edu
Office hours: MWF, 11:00 - 11:50 am

• **Prerequisite:** Stat 511 (firm requirement)

• **Text:** The primary course text will be in the form of course notes made available by the instructor. Auxiliary texts (not required) that contain relevant material include:

- *Design and Analysis of Experiments*, Angela Dean and Daniel Voss, 1999, Springer-Verlag, ISBN 0-387-98561-1
- *Experiments: Planning, Analysis, and Parameter Design Optimization*, C.F. Jeff Wu and Michael Hamada, 2000, Wiley, ISBN 0-471-25511-4
- *Design and Analysis of Experiments*, any edition, Douglas G. Montgomery, Wiley.

• **Web Page:** <http://mmorris.public.iastate.edu/stat512/>

• **Approximate Syllabus:**

Topics	Approx. number of lectures
Introduction to Basic Ideas	2
Completely Randomized Designs, Linear Models Review	7
Complete Block and Related Designs	4
Latin Square and Related Designs	3
Some Analysis for CRDs and Orthogonal Blocks	2
Balanced Incomplete Block Designs	3
Random Block Effects	3
Factorial Treatment Structure	3
Split-Plot and Related Designs	3
Unblocked 2-level Factorial Experiments	3
Blocked 2-level Factorial Experiments	4
Regular 2-level Fractional Factorials	4
Irregular 2-level Fractional Factorials	1
Overview of 3-level Factorial Designs	optional topic, if time allows

• **Course Requirements:**

1. *Homework:* Semi-regular assignments will be made during the semester. Papers will generally be collected in class one week following the day on which the assignment is made. Some assignments will involve the use of statistical or other software.
2. *Quizzes:* Two closed-book in-class quizzes will be given during the semester.
3. *Final Exam:* A comprehensive closed-book exam will be given Monday, December 10, 9:45 - 11:45 am (tentative schedule).

• **Approximate Quiz Schedule:** September 28, November 2.

• **Grading System:**

Homework 10% (of course grade)
Quizzes 2 × 25%
Final 40%

• **Disability Resources:** “If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with Dr. Morris within the first two weeks of the semester. Retroactive request for accommodations will not be honored. Please have Disability Resources complete a SAAR form verifying your disability and specifying the accommodations you will need for this course. You will need to present this form to Dr. Morris.”