## Syllabus for STA 305/1004 "Experimental Design"

Instructors Prof. Radu Craiu (lecturer) and Ximing Xu (Teaching Assistant) When and Where Wednesdays 6-9pm in SS 2102

Textbook Design and Analysis of Experiments by Angela Dean and Daniel Voss.

- Topics
- 1. Designs with one source of variation.
- 2. Complete randomized design.
- 3. Experiments with crossed treatment factors.
- 4. Complete randomized block designs.
- 5. Factorial designs.
- 6. Inferences for contrasts and means.
- 7. Checking model assumptions.
- 8. ANOVA and ANCOVA.
- 9. Sample size calculations.
- Software We will use SAS to analyze some of the data in the textbook. All the data files are available online at:

  http://www.wright.edu/dan.voss/bookdata/data.html
- Marking The mark is based on 3-4 homework assignments (30%), one in-class midterm examination (30%) and one final examination (40%).
  - Policy You will be penalized 10% of the mark for EACH day of lateness after the due date of the assignment. If you miss the midterm, there will be no make-up examination. The weight of the midterm will be shifted to the final exam.

How your presentation will be evaluated:

Content [weight: 70%]

• Is there evidence that you understand your project, have made progress, have thought about what you still need to learn or do or issues to be resolved and have a clear plan?

Clarity [weight: 20%]

- Could the points of your presentation be easily understood by your classmates?
- Are you organized?

Delivery [weight: 10%]

- Was everything that you said easy to hear?
- Was your presentation style engaging?

## Presentation order:

- 1. Felicity's project
- 2. Denise's project
- 3. Clara's project
- 4. Joseph's project
- 5. Shery's project
- 6. Jura's project
- 7. Stephanie's project
- 8. Georgia's project