

Spring 2013 550.400 Mathematical Modelling and Consulting

Instructor: Dr. Nam H. Lee

Email: nhlee@jhu.edu

OH: See the information on sections

Lecture: Shaffer 2, MW from 4.30 PM to 5.45 PM

Section: Shaffer 2, Th from 9.00 AM to 9.50 AM

Keywords: An Introduction to R, Writing R Extensions, Mathematical Statistics Through Applications, Using LaTeX, Quiz, Project Proposal, Final Deliverables

Textbooks:

- 1) The Chicago Guide to Writing about Multivariate Analysis (Miller)
- 2) Stat Labs: Mathematical Statistics Through Applications (Nolan & Speed)

Grading: Final course grade will be based on

- 1) Quizzes on R and understanding of statistical concepts (33%)
- 2) Homework/small projects (33%)
- 3) Final project and its preparations (33%)

Quizzes will be given in class. There is no makeup quiz. The lowest two quiz grades will be dropped. If you miss a quiz, your grade on that will be a zero and will constitute one of the two dropped grades.

Homework policy: Homework is due one week from day of assignment and will be collected occasionally in class and occasionally via Blackboard. If you are unable to get to class when the homework is due in class, please make an arrangement with the grader to drop your homework before the class starts. You are encouraged to collaborate on *ideas* with your colleagues, but you should always compose your own reports, math solutions and computer programs.

Equipment: You will need your own computer with the most recent version of R, LaTeX, Git, Rstudio installed. You will also need access to a computer that can capture streaming screens with voice over. In Mac OSX, Quicktime can do this easily.

Grader: Huong Trinh

Email: ttrinh6@jhu.edu

OH: See the information on sections

Sections: There may be certain sections in which your attendance will be required. Quizzes might be conducted in certain sections. Additional lectures might be given in certain sections. You will be informed in advanced when your attendance at a section will be expected. Please be sure to leave this time slot open for such circumstances. For the most part, sections will constitute an especially important resource for students in need of help. When there is no particular event scheduled during a section, either Grader or Instructor will hold an OH during the hour.

Final Deliverables: Final Deliverables include

- 1) Final Report using the course LaTeX template
- 2) Final Video Presentation using the course LaTeX template
- 3) Final R package with full documentation
- 4) Peer evaluation summarizing contribution of team members

Grading of Final Deliverables will be based on evidence of:

- 1) Creativity
- 2) Clarity of presentation
- 3) Thoroughness of investigation
- 4) Thoughtfulness of investigation
- 5) Effort expended
- 6) Critical thinking

Last Modified: 02/04/2013