

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:

- 1) About 6 quizzes. They will be given in class and section.
- 2) There is no makeup quiz. The lowest two quiz grades will be dropped.
- 3) If you miss a quiz, your grade on that will be a zero and will constitute one of the two dropped grades.

Homework policy:

- 1) Homework is due one week from day of assignment and will be collected in class or via Blackboard.
- 2) 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.
- 3) No late turn-in. About 6 homework sets.

You are encouraged to collaborate on *ideas* with your colleagues, but you should always compose your own reports, math solutions and computer programs. See also Statement of Ethics posted on Blackboard.

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. You may need to bring your laptop in class. Be sure to have your laptop fully charged.

Grader: Huong Trinh

Email: ttrinh6@jhu.edu

OH: Noon - 1 PM, Thursday (Clark 307)

Sections:

- 1) 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.
- 2) You will be informed in advanced if your attendance at a section is expected.
- 3) Please be sure to leave this time slot open for such circumstances.
- 4) When there is no particular event scheduled during a section, 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

Course Git Repository:

<https://github.com/nhlee/550400.ravenxlvii.git>