

Probability and Statistics with Programming

Course Information

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Probability and Statistics

- 3 Credits Course
- Lectures: 3 hours of lectures weekly
 - Tuesday 12.00 to 1.30 pm
 - Thursday 12.00 am to 1.30 pm
- Type: Theory/Tutorial/programming (Lectures)
- Attendance: Please check Ucheck for attendance, absence and late rules
 - Attendance: 2 min before and 5 min after lecture
 - Late: after 5 to 10 mins
 - Absence: after 10 mins
- No Sort of Unethical Activities

Probability and Statistics (Probability/Statistics)

Assessment

- Mid-term exam: 25%
- Final exam: 30%
- Group Project: 20%
- Homework/Assignment: 15%
- Attendance: 10%

- Objective: Multiple choice, True/False, Matching, and Completion

- Subjective: Short-answer essay, Extended-response essay, Problem solving.

Probability and Statistics

Course Materials

- PDFs of slides
- The slides are available in Blackboard of Sejong University
- Sometimes the slides will be updated at a later date.

- Some more references and links for lectures notes maybe given time to time

- R
 - Some examples and the programming elements of the coursework will use R.

Probability and Statistics

Outline

Probability

- Concepts of Probability
- Random Variables and probability distributions

Statistics

- Hypothesis Testing
- Analysis of Variance (ANOVA)

Implementation in R Programming

Probability and Statistics

- Syllabus

Probability

- Conditional Probability and Independence
- Discrete and Continuous Random Variables
- Probability Distributions
- Expectation and Variance
- Central Limit Theorem
- Estimation

Probability and Statistics

- Syllabus

Statistics

- Hypothesis Testing: Single and Two Samples
- ANOVA: Single and Multifactor
- Simple Linear Regression
- Multiple Linear Regression

Contact

Contact

- E-mail (Preferred):
 - islam.smriaz@gmail.com
 - riaz@sejong.ac.kr
- Name/ID should be mentioned in any contact.
- Office: 314 (Gunja Building)
 - A prior appointment through e-mail is required.

Contact

Do Not Contact For:

Contact is just for administrative purpose

- Problem Solving
- Assignment Solving
- Understanding subject matter

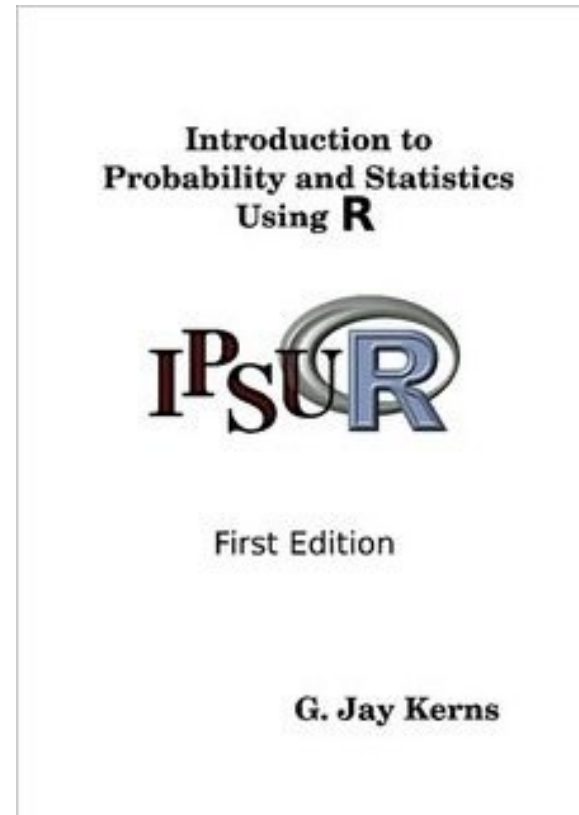
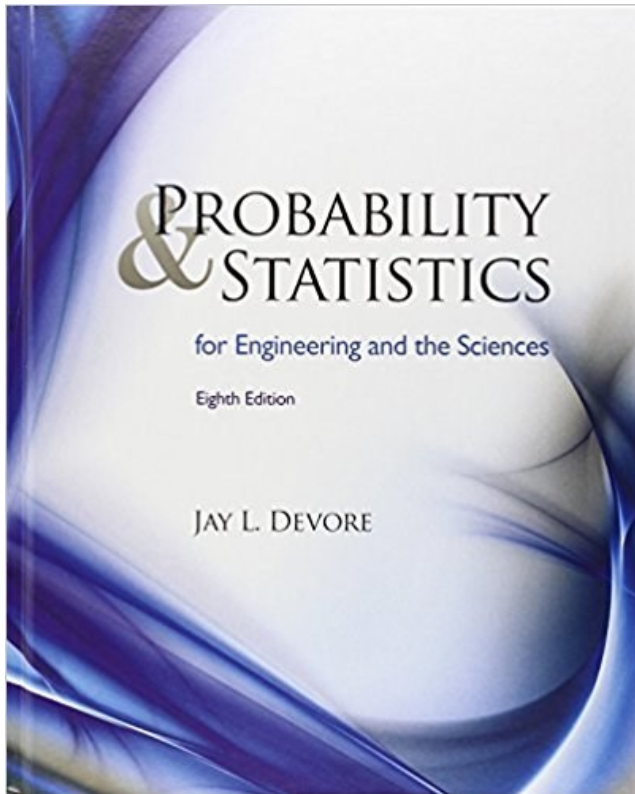
All Lessons related matter will be discussed in the Class

Things to Follow

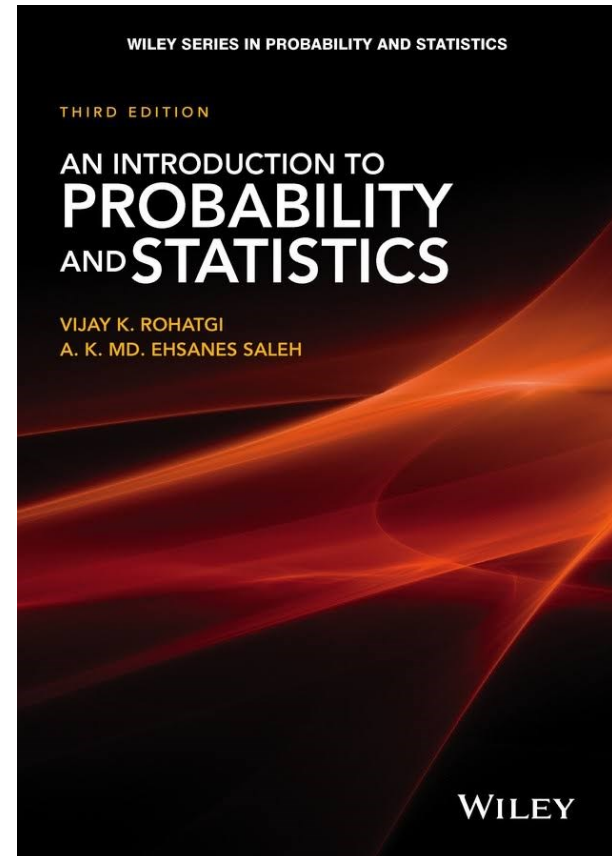
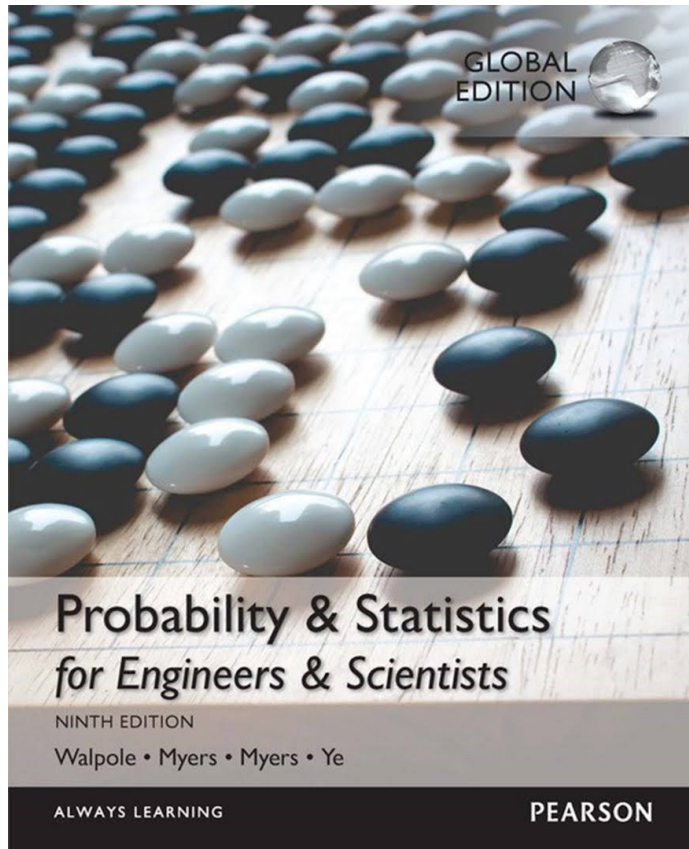
- Assignment/HW via e-mail is not acceptable
- Assessment rubrics (will be explained soon) will be followed to evaluate assignments/projects and exams.
- University/Department rules and regulation must be followed.
- Honesty will be appreciated.
- More: Will be explained time to time

Probability and Statistics

- Recommended Text Book

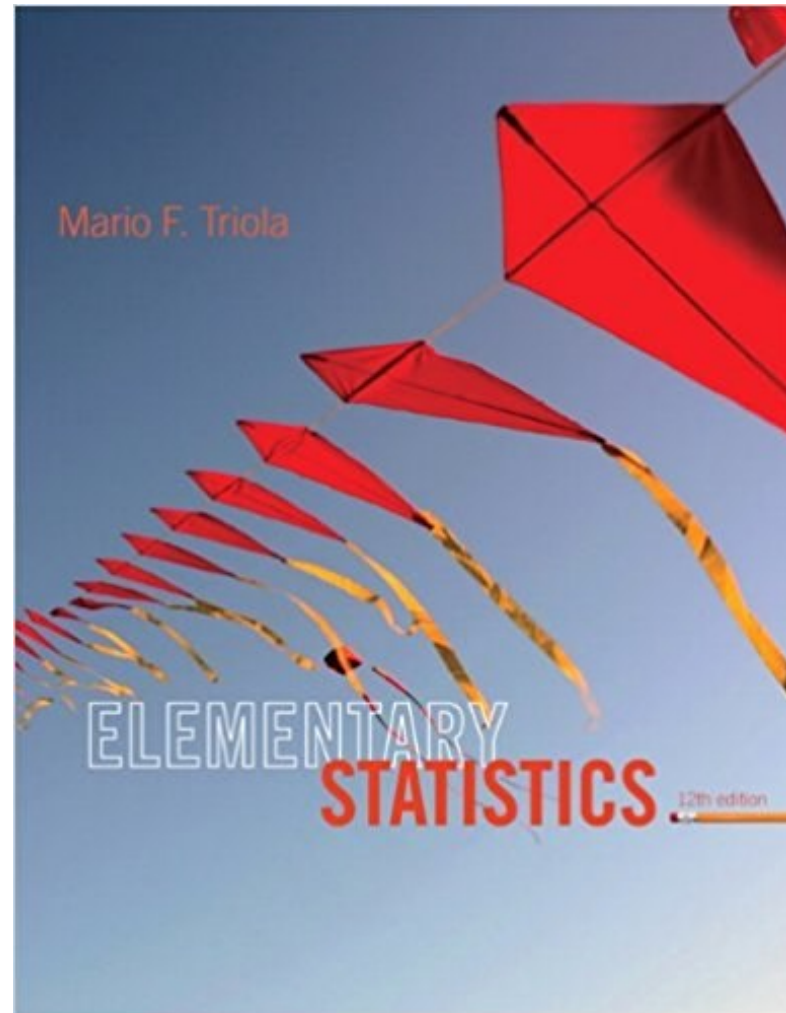


Probability and Statistics



Probability and Statistics

- Statistics Part



Q&A

