

# Computational Statistics





# Course Outline

- Introduction
  - Different Statistical Software
- Data Preparation, Management, Manipulation, Summarization with:
  - SPSS
  - R (R Commander)
  - Ms. Excel
- Data Tabulation and Visualization



# Course Outline

- Generate Different Statistical Distribution (with Rcmdr)
- Simple Linear Regression and Correlation
- Basic R Programming
- Developing Simple Graphical User Interface in R
- Resampling Methods
- Statistical Inference (Point and interval estimation)



# Course Outline

- Hypothesis testing: one, two sample t-test (test for mean difference, proportion and variance)
- Analysis of Variance (Anova): one and two way Anova.
- Introduction to Design of Experiment
- Final Project



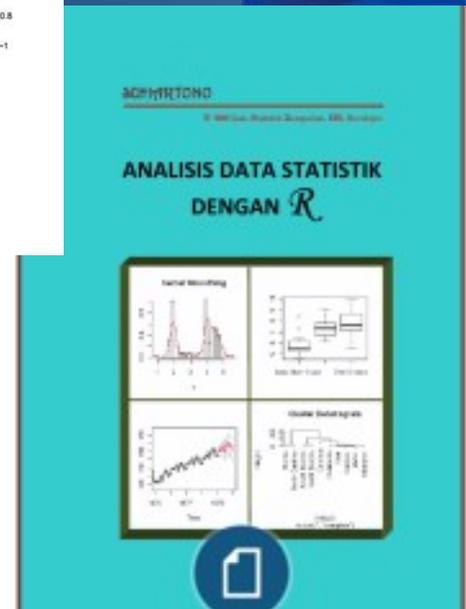
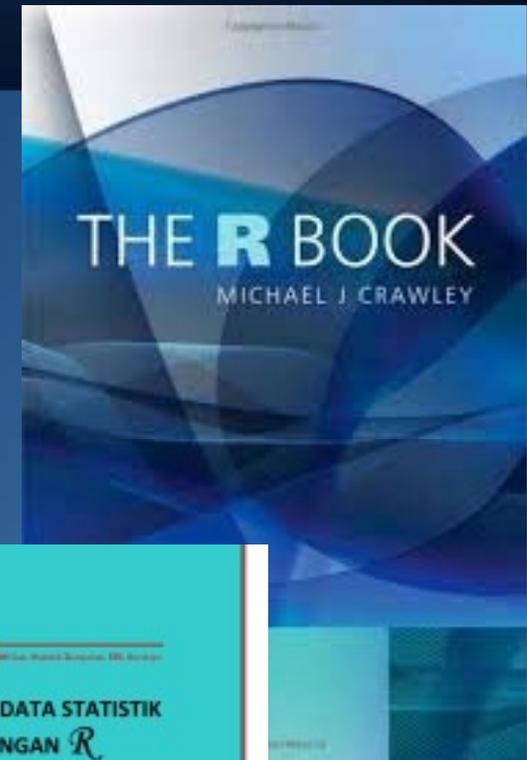
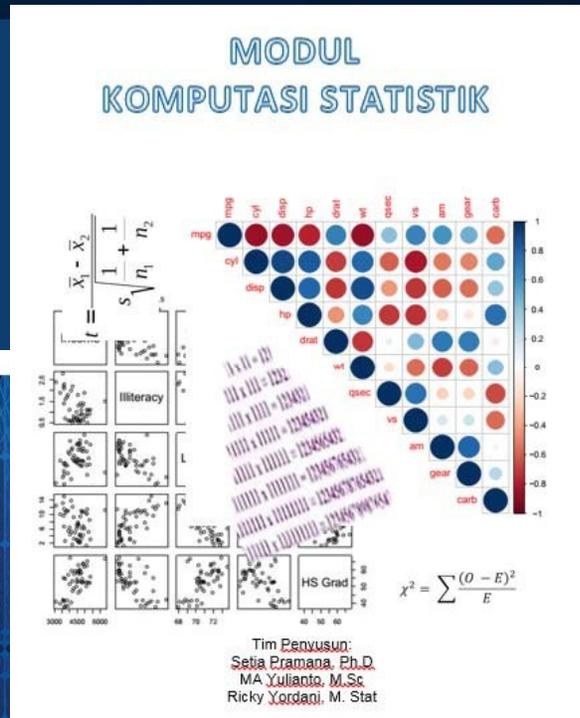
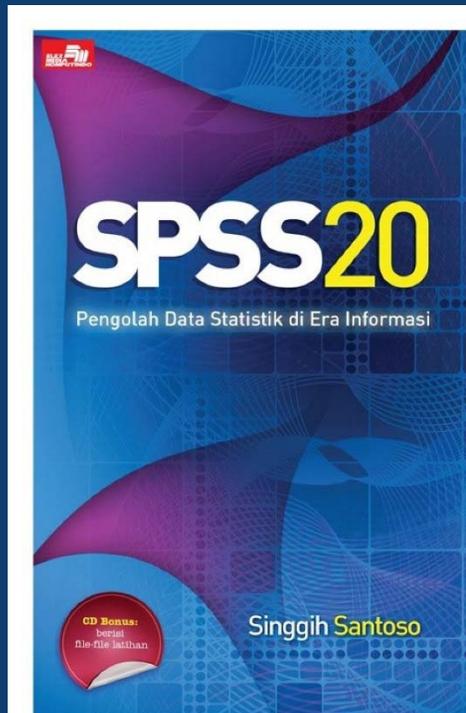
# Course Workload

20% Theory, 80% practice

Group Project

Presentation

# Reference Books



Computational