Syllabus
Statistics 440.605

Instructor: Ahmed Saber Mahmud
Class Time: 6:00-8:45 PM
Office Hours: I will be available before and after the class for queries
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Overview
The prerequisite of this course is basic familiarity with differentiation, integration, and optimization.

Textbook
The required textbook for this course is:

Anderson, Sweeney, and Williams,
“Statistics for Business and Economics” (10th Edition) (ASW in short)

The other text that you can refer (but no need to buy it) to is:

Ross, Sheldon,
“A First Course in Probability”

Course Requirements
There are two in-class exams each accounting for 40% of the total grade. Problem sets will make up for the other 20%. During each week, problems will be assigned and collected during the coming week.

Problem sets can be discussed and you are encouraged to submit them in a group.
Regular attendance of classes is encouraged but not required.
Topics

1. Some Numerical Measures  
   Required text: ASW Chapter 3

2. Basic Probability  
   Required text: ASW Chapter 4

3. Discrete Probability Distributions  
   Required text: ASW Chapter 5

4. Univariate Probability Distributions  
   Required text: ASW Chapter 6

5. Bivariate Probability Distributions  
   Required text: Lecture Notes

6. Sampling and Sampling Distributions  
   Required text: ASW Chapter 7

7. Interval Estimation and Hypothesis Testing  
   Required text: ASW Chapter 8 & 9

8. Inferences from Two Means and Variance  
   Required text: ASW Chapter 10 & 11

9. Goodness of Fit and Independence  
   Required text: ASW Chapter 12

10. ANOVA  
    Required text: ASW Chapter 13

11. Method of Moments and MLE  
    Required text: Lecture Notes