Statistics (I) - 2022

1. Objective：

The main objective of this course is to provide students the fundamental probability theory and the necessary tools for the analysis of actual and realistic data. To this aim, the course will cover the following topics: numerical descriptive measures, basic probability, some important distributions, and sampling distributions.

2. TEXTBOOK:

Berenson et al., (2019): Basic Business Statistics: Concepts and Applications, 14th edition, Pearson. (華泰文化代理)

3. Reference book

林惠玲、陳正倉，2010，統計學：方法與應用，四版，双葉書廊。

4. Software: Microsoft Excel

5. Grading
   Class Participation 6%

   第一次 Midterm Examination: 30%

   第二次 Midterm Examination: 30%

   第三次 Final Examination: 34%

6. COURSE OUTLINE

Fall course (Sep. – Jan.)
Chapter 1: An Introduction to Business Statistics
Chapter 2: Descriptive Statistics: Tabular and Graphical Methods
Chapter 3: Numerical Descriptive Measures
Chapter 4: Basic probability
Chapter 5: Some important discrete probability distributions
Chapter 6: The normal distribution and other important continuous

probability distributions
Chapter 7: Sampling and sampling distributions
Chapter 8: Confidence interval estimation

Spring course (Feb. – June)

Chapter 9: Hypothesis Testing with One Sample
Chapter 10: Hypothesis Testing with Two Samples
Chapter 11: Analysis of Variance : Chi-Square Tests and the
             F-Distribution
Chapter 12: Nonparametric Tests
Chapter 13: Simple Linear Regression
Chapter 14: Dummy Variable and Simple Linear Regression

Office Hours: Monday 1:00-2:00 (TSMC Building 750,
styu@mx.nthu.edu.tw)