

機率與統計

Probabilities and Statistics

資訊工程系四日二A

課號 2552

Instructor：洪士程 教授兼系主任


E-Mail: schong@cyut.edu.tw

Room: 資訊大樓M313


Tel: 7631

Course Time & Office Hours

Course Time


 Thursday 2 (9:25 - 10:15)

 Classroom: T2-208

 Friday 2,3 (9:25 - 11:15)

 Classroom: T2-407

Office Hours

 Tuesday 10:25-12:10



Credits

 Required or Elective

Required (必修)

 Credits

3 Credits (三學分)

Goal

 This course gives an introduction to the concepts of probability and the functions of random Variables..

 Give an introduction to:


- Introduction.
- Basic Probability.
- A Single Random Variable.
- Functions of a Random Variable and Expectations.
- Two Random Variables.
- Expectations and Functions.
- Characteristic Function.
- Multiple Random Variables.

Text Book

 Probability and Statistics for Engineering and Science, 9th Ed., 2016.

 Jay L. Devore

 Brooks Cole (俊傑書局代理)

 **ISBN-13: 9781305251809**

Reference Books







 Reference:

Introduction to Probability and Statistics, 4th
edition, 2008.

J. Susan Milton and Jesse C. Arnold

Publisher: McGraw-Hill

Schedule of Progress (1/2)

-  Introduction to course (week 1)
-  Chap 1 Overview and Descriptive Statistics (week 2)
-  Chap 2 Probability (weeks 3,4)
-  Chap 3 Discrete Random Variables and Probability Distributions (weeks 5,6)
-  Chap 4 Continuous Random Variables and Probability Distributions (weeks 7,8)
-  Midterm exam (week 9)

Schedule of Progress (2/2)

- 📄 Chap 5 Joint Probability Distributions and Random Samples (weeks 10,11)
- 📄 Chap 6 Point Estimation (weeks 12,13)
- 📄 Chap 7 Statistical Intervals Based on a Single Sample (weeks 14,15)
- 📄 Chap 8 Tests of Hypotheses Based on a Single Sample (weeks 16,17)
- 📄 Final exam (week 18)

Resources

 Text Book





 Handout

<http://tronclass.cyut.edu.tw/>

TronClass數位教學平台



Evaluation

-  Quiz (30%)
-  Participation (10%)
-  Mid exam (30%)
-  Final exam (30%)