

機率與統計
Probabilities and Statistics
資訊工程系四日二B
課號 2614

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

 Monday 3,4 (10:25 - 12:10)

 Classroom: G-213

 Tuesday 6 (14:30 - 15:20)

 Classroom: G-213

Office Hours

 Thursday 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 (week 3)
-  Chap 3 Discrete Random Variables and Probability Distributions (weeks 4,6)
-  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)
- 📄 Final exam (week 17)

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%)