

機率與統計

Probabilities and Statistics

資訊工程系四日二A

課號 2597

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

Tuesday 6 (14:30 - 15:20)

Classroom: G-106

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

Classroom: T2-216

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 (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%)