機率與統計
Probabilities and Statistics
資訊工程系四進三A
課號 3863

Instructor：洪士程

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Room:理工大樓E726

Tel: 7801

Course Time & Office Hours

- Course Time
- Monday A,B,C (18:25 - 20:45)
- Classroom: T2-509.1
- Office Hours
- Wednesday 9:00-12:00

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,7th Ed., 2008.
- Devore
- Brooks Cole

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://lms.ctl.cyut.edu.tw/

LMS-數位學習系統

Evaluation

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