

朝陽科技大學 096學年度第2學期教學大綱
Probabilities and Statistics 機率與統計

當期課號	3766	Course Number	3766
授課教師	姚志佳	Instructor	YAO,CHIH CHIA
中文課名	機率與統計	Course Name	Probabilities and Statistics
開課單位	資訊工程系(四進)三A	Department	
修習別	必修	Required/Elective	Required
學分數	3	Credits	3
課程目標	本課程主要介紹基本機率觀念及隨機變數函數，其主要涵蓋的範圍有： 1. 簡介 2. 基本機率 3. 單一隨機變數 4. 隨機變數函數 5. 雙隨機變數 6. 函數及期望值 7. 特徵函數 8. 多隨機變數	Objectives	This course gives an introduction to the concepts of probability and the functions of random Variables. Topics to be covered are: 1. Introduction. 2. Basic Probability. 3. A Single Random Variable. 4. Functions of a Random Variable and Expectations. 5. Two Random Variables. 6. Expectations and Functions. 7. Characteristic Function. 8. Multiple Random Variables.
教材	Walpole, Myers, Myers and Ye, "Probability & statistics for engineers and scientists"	Teaching Materials	Walpole, Myers, Myers and Ye, "Probability & statistics for engineers and scientists"
成績評量方式	平時成績20%，期中考50%，期末考30%	Grading	Tests and homeworks 20%, midterm 50%, final 30%
教師網頁	http://www.cyut.edu.tw/~ccyao		
教學內容	1. 統計學與資料分析介紹 2. 機率 3. 隨機變數與機率分佈 4. 數學期望值 5. 離散機率分佈 6. 連續機率分佈 7. 隨機變數的函數 8. 基本抽樣分佈與資料敘述 9. 單樣本和雙樣本的推定問題	Syllabus	1. Introduction to statistics and data analysis 2. Probability 3. Random variables and probability distributions 4. Mathematical expectation 5. Some discrete probability distributions 6. Some continuous probability distributions 7. Functions of random variables 8. Fundamental sampling distributions and data descriptions 9. One and two sample estimation problems

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