

**朝陽科技大學 097學年度第2學期教學大綱**  
**Probabilities and Statistics 機率與統計**

<b>當期課號</b>	3767	<b>Course Number</b>	3767
<b>授課教師</b>	許志宇	<b>Instructor</b>	HSU,CHIH YU
<b>中文課名</b>	機率與統計	<b>Course Name</b>	Probabilities and Statistics
<b>開課單位</b>	資訊工程系(四進)三A	<b>Department</b>	
<b>修習別</b>	必修	<b>Required/Elective</b>	Required
<b>學分數</b>	3	<b>Credits</b>	3
<b>課程目標</b>	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	<b>Objectives</b>	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.
<b>教材</b>	1.The Probability Tutoring Book 2.Probability, Random Variables, and Random Signal Principles, 4th Edition Peyton Peebles Jr., UNIV OF FLORIDA @ GAINESVILLE	<b>Teaching Materials</b>	1.The Probability Tutoring Book 2.Probability, Random Variables, and Random Signal Principles, 4th Edition Peyton Peebles Jr., UNIV OF FLORIDA @ GAINESVILLE
<b>成績評量方式</b>	小考 40% 期末考 30% 期中考 30%	<b>Grading</b>	Class test 40% Midterm Exam 30% Final Exam 30%
<b>教師網頁</b>	-		
<b>教學內容</b>	這門課適合大學的資訊與電機領域的同學修習,內容包含基礎理論與實際應用,內容組織方式注重邏輯一貫,讓同學了解機率與統計的概念,同時也將介紹離散時間的隨機程序與序列.將有助於未來對於數位訊號處理及數位時間線性系統的學習.	<b>Syllabus</b>	The course is an introduction to probability theory for the junior-senior level course in electrical engineering. The course offers a careful, logical organization which stresses fundamentals and includes practical applications for engineers to understand probability concepts. The course includes discrete-time random processes and sequences, and other topics in the general area of digital signal processing, such as the DT linear system.

尊重智慧財產權，請勿非法影印。