

朝陽科技大學 099學年度第2學期教學大綱  
Probabilities and Statistics 機率與統計

當期課號	2459	Course Number	2459
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(四日)二A	Department	
修習別	必修	Required/Elective	Required
學分數	3	Credits	3
課程目標	<p>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：</p> <ol style="list-style-type: none"> <li>1. 簡介</li> <li>2. 基本機率</li> <li>3. 單一隨機變數</li> <li>4. 隨機變數函數</li> <li>5. 雙隨機變數</li> <li>6. 函數及期望值</li> <li>7. 特徵函數</li> <li>8. 多隨機變數</li> </ol>	Objectives	<p>This course gives an introduction to the concepts of probability and the functions of random Variables. Topics to be covered are:</p> <ol style="list-style-type: none"> <li>1. Introduction.</li> <li>2. Basic Probability.</li> <li>3. A Single Random Variable.</li> <li>4. Functions of a Random Variable and Expectations.</li> <li>5. Two Random Variables.</li> <li>6. Expectations and Functions.</li> <li>7. Characteristic Function.</li> <li>8. Multiple Random Variables.</li> </ol>
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	<a href="http://www.cyut.edu.tw/~ccyao">http://www.cyut.edu.tw/~ccyao</a>		
教學內容	<ol style="list-style-type: none"> <li>1. 統計學與資料分析介紹</li> <li>2. 機率</li> <li>3. 隨機變數與機率分佈</li> <li>4. 數學期望值</li> <li>5. 離散機率分佈</li> <li>6. 連續機率分佈</li> <li>7. 隨機變數的函數</li> <li>8. 基本抽樣分佈與資料敘述</li> <li>9. 單樣本和雙樣本的推定問題</li> </ol>	Syllabus	<ol style="list-style-type: none"> <li>1. Introduction to statistics and data analysis</li> <li>2. Probability</li> <li>3. Random variables and probability distributions</li> <li>4. Mathematical expectation</li> <li>5. Some discrete probability distributions</li> <li>6. Some continuous probability distributions</li> <li>7. Functions of random variables</li> <li>8. Fundamental sampling distributions and data descriptions</li> <li>9. One and two sample estimation problems</li> </ol>

尊重智慧財產權，請勿非法影印。