

國立台灣科技大學 114學年 第2學期 課程大綱

Spring 2026 NTUST Course Outline

授課教師：項維欣

Instructor:Hsiang, Wei-Hsi

課程名稱：統計學(下)

Course Title : Statistics (II)

2026/6/22

<p>課程代號： MB270B001 Course Code</p> <p>學分數： 3 Credits</p>	<p>必選修：必修/全學年 Required/Electve:Required/Full Yr.</p> <p>先修課程： Prerequisites</p>
<p>節次教室： W10(TR-512) W7(TR-512) W8(TR-512) W9(TR-512) Time/Location</p>	
<p>專業核心能力： Core Professional Competencies</p>	
<p>課程網址： Course Website <a href="https://moodle2.ntust.edu.tw/">https://moodle2.ntust.edu.tw/</a></p>	
<p>課程宗旨： Course Objectives</p> <p>Cultivating Statistical Thinking: This course is designed to help students develop a statistical mindset, enabling them to understand and apply statistical methods to address real-world management issues. Students should learn how to extract information from data, analyze trends, make reasonable inferences, and support managerial decision-making.</p> <p>2. Nurturing Decision-Making Abilities: The teaching objectives emphasize nurturing students' decision-making abilities. Through learning statistical methods, students can gain a better grasp of uncertainty and risk, allowing them to make wiser choices when confronted with complex management decisions.</p> <p>3. Promoting Team Collaboration: In the process of learning statistics, students might engage in group projects or collaborative exercises, fostering teamwork and communication skills. These abilities are valuable in their future careers.</p>	
<p>課程大綱： Outline of Lectures</p> <p>The schedule will be flexibly adjusted based on the actual implementation and learning progress.</p> <ol style="list-style-type: none"> <li>1 Introduction Chapter 8 Sampling, Sampling Methods, and the Central Limit Theorem</li> <li>2 Chapter 9 Chapter 9 Estimation and Confidence Intervals</li> <li>3 Chapter 10 One-Sample Test of Hypothesis</li> <li>4 Chapter 11 Two-Sample Test of Hypothesis</li> <li>5 Exam 1 Ch8~11</li> <li>6 Chapter 12 Analysis of Variance</li> <li>7 Review and Chapter 13 Correlation and Linear Regression</li> <li>8 Mid-term buffer</li> <li>9 Chapter 14 Multiple Regression Analysis</li> <li>10 Chapter 15 Nonparametric Methods: Nominal Level Hypothesis Tests</li> <li>11 Chapter 16 Nonparametric Methods: Nonparametric Methods: Analysis of Ordinal Data</li> <li>12 Exam 2 Ch12~16</li> <li>13 Individual Project 1</li> <li>14 Individual Project 2</li> <li>15 Individual Project Presentation</li> <li>16 Final Buffer</li> </ol>	
<p>授課方式： Method of Instruction</p> <p>講授 Lecture : 50%</p> <p>分組討論 Group discussion : 0%</p> <p>案例研討 Case study : 0%</p>	

	<p>操做練習 Practical exercises : 50%</p> <p>講授 Lecture : %</p>
教科書 : Textbooks	Lind, Marchal, and Wathen, 2024, Statistical Techniques in Business & Economics, 19th ed. <a href="https://eshop.hwatai.com.tw/SalePage/index/8901870">https://eshop.hwatai.com.tw/SalePage/index/8901870</a> 華泰代理。
參考書目 : References	陳乃維, 2024, 商用統計學 (Lind/Statistical Techniques in Business and Economics 19e)/19版。 <a href="https://eshop.hwatai.com.tw/SalePage/Index/9789161?garefersrc=HotsaleInCategory">https://eshop.hwatai.com.tw/SalePage/Index/9789161?garefersrc=HotsaleInCategory</a> 華泰代理。
修課須知 : Notice	<p>1 Teaching assistants (TAs) will be available to provide support.</p> <p>2 The course will utilize Moodle, Google Classroom, Mentimeter and Zuvio as learning platforms.</p> <p>3 The syllabus provided above is for course shopping reference only. The official syllabus will be finalized after explanation and discussion with enrolled students during the first week of class.</p> <p>4 All enrolled students are required to attend the Week 1 classes.</p>
評量方式 : Grading	<p>1 Close Book Exams 40% (Ch8-11 &amp; Ch12-16)</p> <p>2 Individual Project 40%</p> <p>3 Several Quiz and assignments 20%</p> <p>◎ There is no comprehensive final exam.</p> <p>◎ A quiz will not be informed in advance.</p> <p>◎ Positive participation in class will gain extra credits.</p>
備註說明 : Notes	NA