



## 教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	統計學(一)AB		學年/學期 Academic Year/Semester	105/1
課程名稱(英文) Course Name in English	Statistics ( I )			
科目代碼 Course Code	IB_2140AB	系級 Department & Year	學二	開課單位 Course-Offering Department
修別 Type	學程 Program	學分數/時間 Credit(s)/Hour(s)	3.0/3.0	
授課教師 Instructor	/林金龍			
先修課程 Prerequisite				
課程描述 Course Description				
<p>H. G. Wells, an English author and historian, predicted over 100 years ago that quantitative reasoning will be as necessary for effective citizenship as the ability to read. He could not have been more correct especially for students in business and economics today who need to acquire the knowledge to organize, analyze, extract and then transform data to present the information. These basic statistical skills and methods are essential for making proper business and personal decisions.</p> <p>This course is the first semester of a one-year undergraduate statistics. It aims at equipping the students with the ability to describe data sets using graphs and numerical summaries, to use probability rules in problem solving, to supply inferential statistical techniques in decision making for business and real life situations. Topics studied include descriptive measures for empirical data, theory of probability, probability distributions, sampling distributions of statistics from large and small samples, estimation theory, hypothesis testing, correlation, and regression.</p> <p>One can never really master statistics without getting his/her hand dirty with real data. Analyzing real data using some statistical package is considered as an essential part of this course. I shall give empirical data analysis during the lectures and assign computer-related home work. For this purpose, I shall teach and ask students to learn and use R, a powerful statistical and yet free package. It can be downloaded from</p> <p><a href="http://www.r-project.org">http://www.r-project.org</a></p>				
課程目標 Course Objectives				
介紹統計推論的概念與各種統計分析方法，引導學生了解統計學在管理決策等方面之應用				
系專業能力 Basic Learning Outcomes				課程目標與系專業能力相關性 Correlation between Course Objectives and Dept.'s Education Objectives



期中考成績 Midterm Exam	30%	✓							
期末考成績 Final Exam	40%	✓							
作業成績 Homework and/or Assignments	30%		✓						含上課出席率
其他 Miscellaneous (_____)									

評量方式補充說明

Grading & Assessments Supplemental instructions

教科書與參考書目 (書名、作者、書局、代理商、說明)

Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)

Textbook:

D. A. Lind, W. G. Marchal and S. A. Wathen (2014),  
Statistical Techniques in Business and Economics, 16th ed. New York: McGraw Hill  
(Imported by Hwa Tai Publishing)

Reference books:

Daniel Navarro (2014), Learning Statistics with R: A tutorial for psychology students and other  
beginners

(Version 0.4) available at :\\

<http://health.adelaide.edu.au/psychology/ccs/teaching/lsr/>

Darrell Huff (1954), How to lie with statistics, New York: W.W. Norton & Company

課程教材網址 (教師個人網址請列在本校內之網址)

Teaching Aids & Teacher's Website (Personal website can be listed here.)

[faculty.ndhu.edu.tw/~jlin](http://faculty.ndhu.edu.tw/~jlin)

其他補充說明 (Supplemental instructions)