國立東華大學

課　綱　Course Outline

管理學院管理科學與財金國際學士學位學程學士班

中文課程名稱 Course Name in Chinese	統計學(一)				
英文課程名稱 Course Name in English	Statistics(I)				
科目代碼 Course Code	MSF_10090	班　別 Degree	學士班 Bachelor's		
修別 Type	學程 Program	學分數 Credit(s)	3.0	時　數 Hour(s)	3.0
先修課程 Prerequisite					

課程目標 Course Objectives

Principles and applications of statistical methods, including central tendency, descriptive analysis of quantitative data, probability, inferential statistics involving one or more populations, and multiple linear regressions. Applications include economics, planning, market research, production/ operations, and decision theory.

系教育目標 Dept.'s Education Objectives

1	培育具備良好數量分析能力之管理人才。 Cultivating management professionals with outstanding ability in quantitative analysis.
2	培育具備財務金融專業知識之人才。 Cultivating professionals with finance-specific knowledge.
3	培育具備國際視野與外語溝通能力之人才。 Cultivating professionals with a global vision and the ability in foreign-language communication.
4	培育具備決策分析與問題解決之技能的管理人才。 Cultivating management professionals with knowledge and skills in decision analysis and problem solving.

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
A	能以數量方法分析與解決問題。 Using quantitative methods to analyze and solve problems.	●

B	具備財務金融領域之分析能力。 Equipped with the ability to analyze finance.	○
C	能善用資訊科技進行資料分析、統整與呈現。 Using information technology to analyze, integrate, and present data.	●
D	具備國際視野與專業外語能力。 Equipped with a global vision and specialized foreign language proficiency.	●
E	具備掌握財經時事議題及研判財經趨勢之能力。 Equipped with the ability to master topics of finance and economy, and other current news, and to diagnose financial and economic tendencies.	○
F	具備一般管理的基礎知識。 Equipped with basic knowledge of management in general.	○

圖示說明Illustration ：● 高度相關 Highly correlated ○中度相關 Moderately correlated

課程大綱
Course Outline

1 Introduction to Course
2 Chapter 1 What is Statistics
  Chapter 2 Frequency distribution and Graphs
3 Chapter 2 Frequency distribution and Graphs
  Chapter 3 Numerical Measures
4 Chapter 3 Numerical Measures
  Chapter 4 Displaying and Exploring Data
5 Test I
6 Chapter 5 A Survey of Probability Concepts
7 Chapter 6 Discrete Probability Distributions
  Chapter 6 Continuous Probability Distributions
8 Chapter 7 Standard Score Transformation
  (Z score) and probability
9 Test II
10 Chapter 8 Sampling methods and the Central limit Theorem
11 Chapter 10 Hypothesis Testing (Z test)
12 Chapter 10 Hypothesis Testing (t test)
13 Test III
14 Chapter 9 Estimate Confidence Interval
15 Chapter 11 Two-Sample Tests of Hypothesis
16 Chapter 12 One-way ANOVA
17 Test IV
18 Flexibility

資源需求評估（師資專長之聘任、儀器設備的配合・・・等）
Resources Required (e.g. qualifications and expertise, instrument and equipment, etc.)

Classroom and its facilities

課程要求和教學方式之建議
Course Requirements and Suggested Teaching Methods

Lecture

其他
Miscellaneous

Statistical Techniques in Business & Economics, 18th ed. by Lind, Marchal & Wathen. McGraw-Hill Irwin (2021), ISBN10: 1260239470