

Department of Statistics/IIMBA

RA70700 Business Decision Methods (企業決策方法) (英語授課)

Fall 2017 (106 學年度第 1 學期)

1. *The mission of the College is to serve business and society in the global economy through developing professionally qualified and socially responsible business leaders as well as through advancing the frontiers of knowledge in business management.*
2. *The strategic objective of Department of Statistics/IIMBA is to cultivate quality professionals with enthusiasm and global perspectives.*

Graduate Program Learning Goals (goals covered by this course are indicated by checks):

✓	1	Graduate students should be able to appreciate business research and to present research findings/ results effectively in speaking and in writing.
✓	2	Graduate students should be able to integrate different functional areas in solving business problems.
		Graduate students should be able to analyze data effectively and to recommend effective statistical methods.
	3	Graduate students should be able to demonstrate leadership skills of a data analysis manager.
		Graduate students should be able to identify ethical dilemmas and to determine necessary courses of action.
✓	4	Graduate students should possess a global business perspective and an awareness of the global business.
✓	5	Graduate students should be able to coordinate actions and solve problems jointly with other members of a professional team.

- **Instructor/開課教師:** Dr. Jeh-Nan Pan
- **Office Hours:** 11:00 am to 12:00 am Everyday
- **Email:** jnpan@mail.ncku.edu.tw
- **Phone:** (06)2757575#53637
- **Class Time & Location:** Every Monday from 18:30 pm to 21:30 pm

➤ **Prerequisite/先修科目:**

Basic Statistics

➤ **Course Description/課程描述:**

Introduction of various quantitative methods/models for solving miscellaneous business problems under certain and uncertain environments. This is a Quantitative Management course for Decision Making.

➤ **Course Objectives/課程目標:**

1. Teach students fundamental decision making theory including decision tables and trees.
2. Introduce various quantitative analysis methods/models for management.
3. Equip students with practical tools/methods for solving business problems through software demonstration and case studies.

➤ **Course Content/課程內容:**

Week 1 : Introduction/Overview of BDM

Week 2 : Introduction and Probability Concepts (Chap1)

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Week 3 : Probability Concepts and Applications (Chap 2)

Week 4 : Decision Theory Models/Tables (Chap 3)

Week 5 : Decision Theory Models/Trees (Chap 3)

Week 6 : Forecasting Methods (Chap 5)

Week 7 : Forecasting and Regression Models (Chap 4, 5)

Week 8 : Review of Decision Models/Forecasting Methods

Week 9 : Mid-term Exam

Week 10 : Linear Programming (Chap 7)

Week 11 : Linear Programming/ Simplex Method (Chap7, M7)

Week 12 : Linear Programming Applications (Chap 8, M7)

Week 13 : LP Applications/Transportation Models (Chap 9)

Week 14 : TRP and Assignment Models (Chap 9)

Week 15 : Integer Programming (Chap10)

Week 16 : Nonlinear and Goal Programming (Chap 10)

Week 17 : Final Project Presentation

Week 18 : Final Exam

➤ **Teaching Approach(es)/教學方法**

序號	教學方法	分配(%)
1	Classroom teaching and discussion	80%
2	Software demonstration using QM software	10%
3	Case studies & discussion	10%
總計		100%

➤ **Textbook/教科書:**

1. Render, B, Stair, R., Hanna, M.E. and Hale, T.S. (2015), Quantitative Analysis for Management, 12th Edition, Pearson Education, London.

➤ **References/參考書目:**

1. Operations Research: An Introduction, H. A. Taha, 8th Edition, Prentice Hall, 2007
2. Introduction to Operations Research, F. S. Hillier and G. J. Lieberman, 8th Edition, McGraw-Hill, 2005.
3. Quantitative Methods for Business, 11th Edition, D. R. Anderson, D. J. Sweeney, and T. A. Williams, Cengage South-Western, 2008.

➤ **Grading Policy/評量方式:**

Midterm and Final Exams 50%

Homework Assignments/ Case study 10 %

Essay/ Participation 10%

Group Project including Final Report & Oral Presentation 30%

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(*Including a grading scheme for AACSB Multiple Assessment:)

		HW	Midterm /Final Exams	Oral Presentation	Final Report	Essay/ Participation
		10%	50%	15%	15%	10%
COMMU	<input checked="" type="checkbox"/> Speaking			60%		
	<input checked="" type="checkbox"/> Writing	20%			30%	70%
CPSI	<input checked="" type="checkbox"/> Inter-discip. Competence/ Prob. Solving	40%	80%		10%	10%
	<input checked="" type="checkbox"/> Critical Thinking/ Innovation	30%	20%	20%	20%	20%
LEAD	<input type="checkbox"/> Leadership					
	<input type="checkbox"/> Ethical Reasoning					
GLOB	<input checked="" type="checkbox"/> Global Vision			10%	20%	
VSP	<input checked="" type="checkbox"/> Teamwork	10%		10%	20%	