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## ②图玄東華大學

# 教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	隨機過程與決策	<b>新究</b>			學年/學期 Academic Year/Semester			
課程名稱(英文) Course Name in English	Stochastic process and decision making							
科目代碼 Course Code	BM77700	系級 Department 博士 & Year		開課單位 Course-Offering Department	企業管理學系			
修別 Type	選修 Elective	學分數/時 Credit(s)/Hou		3	3.0/3.0			
授課教師 Instructor	/林達榮							
先修課程 Prerequisite								
課程描述 Course Description								

- 1. 學習隨機過程理論與實務應用之基本知識
- 2. 利用不確定隨機過程結合相關決策科學之研究議題進行分析
- 3. 利用實際step by step完成數理模型建構並撰寫小論文投稿研討會或學術期刊為宗

#### 課程目標 Course Objectives

This course considers optimal stochastic decision processes from the viewpoint of stochastic programming. It focuses on theoretical properties and on approximate or numerical solution techniques for time-dependent optimization problems with random parameters (multistage stochastic programs, optimal stochastic decision processes). Methods for finding approximate solutions of probabilistic and expected cost based deterministic substitute problems are presented. Besides theoretical and numerical considerations, the proceedings volume contains selected refereed papers on many practical applications to economics and engineering: risk, risk management, portfolio management, finance, insurance-matters and control of robots.

	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	具備國際企業管理之知識與能力。Students will have basic knowledge of international business.	0
В	具備邏輯思考、問題分析與解決之能力。Students will be able to identify, analyze and solve business problems with logical thinking.	•
С	具備溝通協調與團隊合作之能力。Students will be able to demonstrate effective communication, coordination and teamwork skills.	0
D	具備國際觀及外語溝通之能力。Students will be able to communicate in foreign languages and have an awareness on global and cultural diversity issues.	0
Е	具備創新、創業之思維與能力。To build a the concept and ability for innovation and entrepreneurship.	0
F	具備服務設計與產業分析之能力。Students will be able to demonstrate the abilities for service design and industry analysis.	•
G	具備國際企業倫理之素養。Students will be able to identify and understand the importance of ethical decision making for international business	0

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

#### 授課進度表 Teaching Schedule & Content

週次Week	內容 Subject/Topics	備註Remarks
1	課程綱要說明 (09/12)	

2	隨機過程原理 (導讀一) (09/19)   簡單的延遲選擇權			
3	隨機過程原理 (導讀二) (09/26) 專案決策選擇			
4	隨機過程原理 (導讀三) (10/03) 決策樹分析			
5	國慶假期_停課(10/10)			
6	隨機過程原理 (導讀四) (10/17) 實質選擇權分析			
7	期刊論文 (導讀一)/TBA (10/24)			
8	期刊論文 (導讀二)/TBA (10/31)			
9	期中考試週 Midterm Exam (11/07) 提交期中報告 (停課)			
10	決策科學模型建構 (一) (11/14)			
11	<b>决策科學模型建構</b> (二) (11/21)			
12	<b>決策科學模型建構</b> (三) (11/28)			
13	隨機過程與決策應用Term Paper討論與撰寫 (一) (12/05)			
14	隨機過程與決策應用Term Paper討論與撰寫 (二) (12/12)			
15	隨機過程與決策應用Term Paper討論與撰寫 (三) (12/19)			
16	隨機過程與決策應用Term Paper討論與撰寫 (四) (12/26)			
17				
18	11     提交期末報告 停課 (01/02)       18     彈性週 (01/09)			
	教 學 策 略 Teaching Strategies			
✓ 課堂講	授 Lecture	Field Trip		
✓ 其他Mis	scellaneous: 論文研讀與討論			
	教學創新自評Teaching Self-Evaluation			
創新教學(	Innovative Teaching)			
✓ 問題導	向學習(PBL) ■ 團體合作學習(TBL) W 解決導向學	로 習(SBL)		
翻轉教	室 Flipped Classroom			
社會責任(	Social Responsibility)			
在地實	踐Community Practice        產學合作 Industy-Academia Cooperati	on		
跨域合作(	Transdisciplinary Projects)			
	學Transdisciplinary Teaching	5		
業師合:	授 Courses Co-taught with Industry Practitioners			
其它 othe	r:			
Ì				

學期成績計算及多元評量方式 Grading & Assessments									
配分項目	多元評量方式 Assessments								
Items	配分比例 Percentage	測驗 會考	實作 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定	其他
平時成績 General Performance	30%			~	~				
期中考成績 Midterm Exam	30%			~	~				
期末考成績 Final Exam	40%		~	~	~				
作業成績 Homework and/or Assignments									
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.)

- 1. 自編講義/TBA
- 2. Journal Paper/TBA

課程教材網址(含線上教學資訊,教師個人網址請列位於本校內之網址)

Teaching Aids & Teacher's Website(Including online teaching information.

Personal website can be listed here.)

http://faculty.ndhu.edu.tw/~tyrone/index.html

其他補充說明(Supplemental instructions)