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# ②國玄東華大學

# 課 網 Course Outline

## 企業管理學系博士班國際企業組

中文課程名稱 Course Name in Chinese	企業財務決策					
英文課程名稱 Course Name in English	Corporate Financial Decision					
科目代碼 Course Code	BM83200	班 別 Degree		博士班 Ph. D.		
修別 Type	選修 Elective	學分數 Credit(s)	3. 0	時 數 Hour(s)	3. 0	
先修課程 Prerequisite	None	•				
<b>埋</b> 积日梗						

#### 課程目標 Course Objectives

- 1. 財務工程與投資工程之連續時間模型進階數學修習
- 2. 隨機過程、隨機微分方程(一般解、特解)求解過程之學習
- 3. 資產價值/企業價值之評價
- 4. 衍生性金融商品與實質選擇權之介紹
- 5. 國際財務管理與國際投資之市場進入與退出策略評估數量模型構建
- 6. 賽局選擇權之發展與衡量

## 系教育目標 Dept.'s Education Objectives

培養具國際企業知識之高階管理人才。

- Build a foundation of international business knowledge to prepare students for being higher-level managers.
- 培養具創新思維與創業能力之高階管理人才。
- Build a foundation of innovation and entrepreneurship to prepare students for being higher-level managers.
- 。 | 培養具服務業經營能力之高階管理人才。
  - Create a managerial ability in Service industry for advanced managers.

培養在地經營理念之高階管理人才。

Offer a program with an emphasis on higher-level management philosophy responsive

	to the Taiwanese business context.		
		課程目標與系專業能 力相關性	
系專業能力		Correlation	
		between Course	
Basic Learning Outcomes		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.	•	

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.	•
Е	具備創新、創業之思維與能力。 To build a the concept and ability for innovation and entrepreneurship.	•
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

### 課程大綱

#### Course Outline

Part I: Basic Financial Mathematics

- 1. A Paradigm for Primary Asset Valuation
- 2. Complication of the Basic Paradigm
- 3. The Valuation of Derivative Securities
- 4. Optimal Decision Strategies and Valuation

Part II: Advanced Investment Strategies

- 1. Investment Opportunities and Investment Timing
- 2. The Value of a Project and the Decision to Invest
- 3. Entry, Exit, Lay-up, and Scrapping
- 4. Dynamic Equilibrium in a Competitive Industry

Part III: Introduction to Advanced Finance and the Mathematics of Continuous-Time Models

- 1. Introduction to Portfolio Selection and Capital Market Theory
- 2. Lifetime Portfolio Selection under Uncertainty
- 3. Theoryof Rational Option Pricing

Part IV: International Financial and Investment Management

- 1. Paper Reading/TBA
- 2. Reporting and Term Paper Writin

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.)

Expertise- Stochastic Process, Partial Differential Equation, Matlab, Mathematica, Crystal Ball

Facilities- Financial Management, Investment Management, Decision Science

#### 課程要求和教學方式之建議

Course Requirements and Suggested Teaching Methods

Lecturing:30% Case studies: 20%

Examinations: 20%

Class Participation: 10% Course project : 20%

## 其他 Miscellaneous

# Textbooks:

1. Shimko, D.C. (1992), Finance in Continuous Time: A Primer, Florida: Kolb Pub. Co. (ISBN:

1878975072)

- 2. Merton, R. C. (1990), Continuous-Time Finance, Massachusetts: Blackwell Pub. (ISBN: 0631158472)
- $3.\,\mathrm{Dixit},\ \mathrm{A.\,V.}$  and Pindyck, R.S. (1994), Investment under Uncertainty: New Jersey: Princeton Univ.

Press. (ISBN:0691034109)