

**成本效益決策分析**  
**Cost Benefit Decision Analysis**  
**627 M5260**  
**627 U1220**  
**一一一學年上學期**

**授課老師：** 吳珮瑛  
農業綜合館 214室  
3366-2663  
Email:piwu@ntu.edu.tw

**授課對象：** 大學部高年級（三、四年級）以上及碩博士班同學，修習「環境與自然資源經濟學領域專長」同學。

**學 分：** 上學期3學分選修課

**上課地點：** 農業綜合館 二樓會議室教室

**課程目的：** 本課程將介紹成本效益分析決策的基本原理、原則與方法，同時討論成本與效益用於公部門及私部門財貨或勞務評估的差異，及其與成本有效性評估的區別。除解析成本效益分析方法用於評估公部門財貨與勞務之個案外，並特別探討相關方法用於私部門財貨、勞務及企業社會責任之評估實例。

**課程要求：**（一）上課參與及出席：不定期點名（一次以20分計）及分組討論之參與。

（二）分組或個人規劃一個個案（是否需分組，視最後修課人數而定）：每一組（或個人）規劃一個個案，說明你（們）進行此個案前應考慮什麼項目與因素？又相關項目是否有適當的評估方法？如有、你（們）將採用本課程講授的那一種（些）評估概念或方法完成個案中某些項目的評估？你（們）不需要找任何數據資料完成評估，除非有現成的數據資料，大家的重點是以本課程所講授的方法，規劃將執行的個案、不是真的需要完成一個評估而後決定是否將執行該計畫。（如需分組、該如何分組、各規劃所需完成的工作，屆時將有詳細指引與說明）

## 學期分數評分標準：

上課出席	30%
報告、討論、評論及參與	70%

其中「報告、討論、評論及參與」70%的分數配比	
口頭報告及ppt準備	35%
提供大家討論的四個問題	15%
針對討論問題的回覆	10%
最後書面報告	40%

如學期末無法實體上課，前述評分規定項目及百分比不變，僅是與報告相關項目改為線上完成。

**主要用書**（以下所列書本有相對完整的成本效益分析學理及評估相關方法；部分書本也有個案，列於各主題下，是更多來自期刊文章的個案，以下所列只是一些範例、然不限於這些範例、尚有更多，一篇文章雖列於某主題下，然可能亦橫跨於兩個及以上的主題）

蕭代基、鄭蕙燕、吳珮瑛、錢玉蘭、溫麗琪，2002。『環境保護之成本效益分析：理論、方法與應用』，台北：俊傑書局。

James, David and Herminia A. Francisco, ed. 2015. *Cost-benefit Studies of Natural Resource Management in Southeast Asia*. Singapore: Springer. 學校有電子圖書。

Organization for Economic Co-operation and Development (OECD), 2018. *Cost-Benefit Analysis and the Environment: Further Developments and Policy Use*. Paris: Organization for Economic Co-operation and Development Publishing. 學校有電子圖書。

上課講義與所發的相關文章。

是否需遠距上課完全以學校規定為主，學校將中央相關單位資訊傳送給全校教職員生，我會通知大家、也請同學注意來自學校的訊息，如需遠距上課，本課程則請同學在原上課時間在線上上課。上課時，畫面請不要用虛擬畫面或任何圖案插畫、請開鏡頭以能看到你本人。

## 課程綱要：

1. 成本效益分析之源起、意義、主要步驟（執行成本效益分析主要元素）
2. 成本效益分析之概念基礎
3. 成本效益分析背後之經濟學原理
4. 除成本效益分析外的其他決策方法（官僚體系如何看待成本效益分析）
5. 何謂環境或自然資源之效益（價值）？
6. 成本與效益之分配
7. 面對風險與不確定性的考量——敏感度分析
8. 成本效益分析選擇不同折現率的意義
9. 效益及損害評估之市場價值評估方法
10. 效益及損害評估之替代市場價值評估法
11. 效益及損害評估之假設市場（非市場）價值評估法
12. 環境成本或效益評估案例
  - 農業生態、文化多功能與田園自然景觀價值評估
  - 生態服務系統（包括森林、國家公園、濕地、保護區等）價值評估
  - 永續發展與自然資本價值評估
  - 能源及再生能源之社會成本及效益評估
  - 碳的社會成本（social cost of carbon）之評估
  - 灌溉水資源、地下水維護與集水區價值評估
  - 道路與交通運輸建設效益評估
  - 食品安全與食品特徵價值評估
  - （農）產品標示價值評估
  - 觀光遊憩休閒價值評估
  - 健康與生命價值評估（value of statistical life, VSL）
  - 企業社會責任的價值評估（social return on investment, SROI）

以下文獻供各位參酌、瞭解世界各國如何使用相關方法，完成成本效益評估之完整個案，或任何個案中部分效益或損害之評估，是給大家一個開頭，輕鬆閱讀、儘量理解、未有壓力！

## 1. 農產業生態、文化多功能、田園自然景觀價值評估

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### 3.永續發展與自然資本價值評估

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## 5. 碳的社會成本 (social cost of carbon) 之評估

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## 6. 灌溉水資源、地下水維護與集水區價值評估

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