



課 綱 Course Outline  
經濟學系學士班

|   |  |                  |                    |  |     |
|---|--|------------------|--------------------|--|-----|
| 中文課程名稱<br>Course Name in Chinese                | 環境經濟學  |                  |                    |  |     |
| 英文課程名稱<br>Course Name in English                | Environmental Economics  |                  |                    |  |     |
| 科目代碼<br>Course Code                             | EC_40200   | 班 別<br>Degree    | 學士班<br>Bachelor' s |  |     |
| 修別<br>Type                                      | 學程<br>Program  | 學分數<br>Credit(s) | 3.0                | 時 數<br>Hour(s)   | 3.0 |
| 先修課程<br>Prerequisite                            | 經濟學原理-個體篇。   |                  |                    |  |     |
| 課程目標<br>Course Objectives                       |  |                  |                    |  |     |
| 使同學瞭解當前的環境保護政策背後的經濟理念，並學習如何以經濟分析工具評估環境保護政策的利弊得失 |  |                  |                    |  |     |
| 系教育目標<br>Dept.' s Education Objectives          |  |                  |                    |  |     |
| 1   | 培育具專業知識與實務發展潛力的優秀經濟人才。<br>Educate students to be equipped with professional knowledge and empirical skills in economics.                       |                  |                    |  |     |
| 系專業能力<br>Basic Learning Outcomes                |  |                  |                    | 課程目標與系專業能力相關性<br>Correlation between Course Objectives and Dept.' s Education Objectives |     |
| A   | 數理分析能力：應用數學與賽局理論分析與解決經濟議題的能力。<br>Mathematical analysis skills: application of mathematical theories and game theory to analyze economic issues |                  |                    | ○  |     |
| B   | 實證經濟分析能力：善用資訊科技進行資訊蒐集、資料統計與計量分析<br>Empirical analysis skills: application of statistics and econometrics in data collection and examination    |                  |                    |  |     |
| C   | 微觀經濟之闡釋能力：通曉個體經濟學相關的理論與應用。<br>Microeconomic perspective: understanding of microeconomic theories and relevant application                      |                  |                    | ○  |     |
| D   | 宏觀經濟之闡釋能力：通曉總體經濟學相關的理論與應用。<br>Macroeconomic perspective: understanding of macroeconomic theories and relevant application                      |                  |                    | ○  |     |

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| E | 樂活能力：具備適應現代社會的學養以及就業能力。<br>Employment opportunities: capabilities of working on important policy and decision challenges in business and government | ○ |
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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: the Economics Perspective on the Environment
  - (1) What is Environmental Economics
  - (2) The Economy and the Environment
- 2、Basic Analytical Concepts and Tools
  - (1) Benefits and Costs, Supply and Demand
  - (2) Economic Efficiency and Markets
  - (3) The Economics of Environmental Quality
- 3、Environmental Analysis
  - (1) Frameworks of analysis
  - (2) Benefits
  - (3) Costs
- 4、Policy Analysis
  - (1) Criteria for Evaluating Environmental Policies
  - (2) Decentralized Policies: Liability Laws, Property Rights, Moral Suasion
  - (3) Command-and-Control Strategies: The Case of Standards
  - (4) Incentive Based Strategies: Emission Taxes and Subsidies
  - (5) Incentive Based Strategies: Transferable Discharge Permits
- 5、Environmental Policies: Case Studies
  - (1) Water Pollution Control Policy in the US
- 6、International Environmental Issues
  - (1) The Global Environment
  - (2) International Environmental Agreement

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.)

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

本課程以講授方式進行，輔以課堂討論。

其他  
Miscellaneous