



教學計劃表 Syllabus

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| 課程名稱(中文) Course Name in Chinese | 環境經濟學 | | 學年/學期 Academic Year/Semester | 107/2 |
| 課程名稱(英文) Course Name in English | Environmental Economics | | | |
| 科目代碼 Course Code | IIE_56100 | 系級 Department & Year | 碩士 | 開課單位 Course-Offering Department |
| 修別 Type | 選修 Elective | 學分數/時間 Credit(s)/Hour(s) | 3.0/3.0 | |
| 授課教師 Instructor | /林慧菁 | | | |
| 先修課程 Prerequisite | | | | |
| 課程描述 Course Description | | | | |
| 主要以講解並討論研究分析環境經濟議題的期刊論文與相關文獻，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。 | | | | |
| 課程目標 Course Objectives | | | | |
| 介紹當前的環境經濟政策之理論架構與分析方法，如：environmental philosophy and ethics, markets and efficiency, the valuation of environmental amenities, pollution regulation, policy options and analysis; and international issues。 | | | | |
| 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 | 數理分析能力：通曉經濟學的理論技巧，應用數學與賽局解決經濟議題的能力。Mathematical analysis skills: Mastering in application of mathematical theories and game theory in analyzing economic issues. | | | ○ |
| B | 實證經濟分析能力：通曉經濟學的實證技巧，善用資訊科技進行資訊蒐集、資料統計與計量分析。Empirical analysis skills: Mastering in 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。Microeconomic perspective: Thorough 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。Macroeconomic perspective: Thorough understanding of macroeconomic theories and relevant application | | | ○ |
| E | 樂活能力：具備適應現代社會的學養以及就業能力。Employment opportunities: Capabilities of working on important policy and decision challenges in business and government | | | ○ |
| F | 溝通表達能力：思路清晰，有能力與人溝通並撰寫專業研究報告。Communication skills: Having a clear mind and capability in writing a professional academic report | | | |
| 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 | 開學週 | | | |
| 2 | 課程介紹 Hanley: the Economics Perspective on the Environment (Ch 1) | | | |

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| 3 | Hanley: (Ch 1), Issues and Trend : Tim Jackson, Prosperity Without Growth, 2009, 2017 | |
| 4 | Issues and Trend: (continued) D. A. Underwood (1998), "The institutional origins of crisis for economy and ecology", Journal of Economic Issues, 32(2), 513-522. Bill Shaw (2001), "Economics and the environment-A land ethic critique of economic policy", Journal of Business Ethics, 33, 51-57. | |
| 5 | Issues and Trend: (continued) John M. Gowdy (2004), "The Revolution in Welfare Economics and Its Implications for Environmental Valuation and Policy", Land Economics, 80(2), 239-257. Paul R. Portney(2000), "Environmental Problems and Policy: 2000-2050", The Journal of Economic Perspectives, 14(1), 199-206. optional: Brian R. Copeland; M. Scott Taylor (2004), "Trade, Growth, and the Environment", Journal of Economic Literature, 42(1), 7-71. | |
| 6 | Basic Concepts:Market Failure (Hanley Ch 2, p. 22-42) | |
| 7 | Basic Concepts:Market Failure (Hanley Ch 2, p. 22-42) | |
| 8 | The Problem of Social Cost R. H. Coase Journal of Law and Economics, Vol. 3, Oct., 1960 (Oct., 1960), pp. 1-44. | |
| 9 | 期中考試週 Midterm Exam | Take-home exam |
| 10 | The Problem of Social Cost: R. H. Coase, "The Problem of Social Cost" , Journal of Law and Economics, Vol. 3, Oct., 1960 (Oct., 1960), pp.1-44. and comments | |
| 11 | The "Coase Theorem": A Reexamination--Comment Jeffrey F. Jaffe The Quarterly Journal of Economics, Vol. 89, No. 4. (Nov., 1975), pp. 660-661. The "Coase Theorem": A Reexamination G. A. Mumeey The Quarterly Journal of Economics, Vol. 85, No. 4. (Nov., 1971), pp. 718-723. | |
| 12 | Information: (Ch 2, p. 43-57) Information and the Coase Theorem Joseph Farrell The Journal of Economic Perspectives, Vol. 1, No. 2. (Autumn, 1987), pp. 113-129. and Externalities: | |
| 13 | Externalities: Decentralization, Externalities, and Efficiency Peter Klibanoff; Jonathan Morduch The Review of Economic Studies, Vol. 62, No. 2. (Apr., 1995), pp. 223-247. and Asymmetric Information | |

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| 14 | Externalities and Asymmetric Information Jeremy Greenwood; R. Preston McAfee The Quarterly Journal of Economics, Vol. 106, No. 1. (Feb., 1991), pp. 103-121. and Porter's Hypothesis | |
| 15 | Regulation and innovation: (Porter's Hypothesis) Tightening Environmental Standards: The Benefit-Cost or the No-Cost Paradigm? Karen Palmer; Wallace E. Oates; Paul R. Portney The Journal of Economic Perspectives, Vol. 9, No. 4. (Autumn, 1995), pp. 119-132. Toward a New Conception of the Environment-Competitiveness Relationship Michael E. Porter; Claas van der Linde The Journal of Economic Perspectives, Vol. 9, No. 4. (Autumn, 1995), pp. 97-118. | |
| 16 | Pollution Control Polic (Porter's Hypothesis) A theoretical foundation of the Porter hypothesis Stefan Ambec and Philippe Barlac Economics Letters Volume 75, Issue 3, May 2002, Pages 355-360 | |
| 17 | Transaction Costs and Tradeable Permits Stavins Robert N. Journal of Environmental Economics and Management Volume 29, Issue 2, September 1995, Pages 133-148 y and R&D Investment : Permits, Standards, and Technology Innovation Juan-Pablo Montero Journal of Environmental Economics and Management Volume 44, Issue 1, July 2002, Pages 23-44 | 6/9畢業典禮 Final take-home exam will be posted (6/20) 給期末考題目 |
| 18 | 期末考試週 Final Exam (期末口頭報告)(交take-home exam) | 1. Oral presentation 2. hand in your take- home exam |

教 學 策 略 Teaching Strategies

- 課堂講授 Lecture
 分組討論 Group Discussion
 參觀實習 Field Trip
 其他 Miscellaneous:

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)
 解決導向學習(SBL)
 翻轉教室 Flipped Classroom
 磨課師 Moocs

社會責任(Social Responsibility)

- 在地實踐 Community Practice
 產學合作 Industry-Academia Cooperation

跨域合作(Transdisciplinary Projects)

- 跨界教學 Transdisciplinary Teaching
 跨院系教學 Inter-collegiate Teaching

- 業師合授 Courses Co-taught with Industry Practitioners

其它 other:

學期成績計算及多元評量方式 Grading & Assessments

| 配分項目 Items | 配分比例 Percentage | 多元評量方式 Assessments | | | | | | | |
|-------------------------------------|--------------------|--------------------|----------|----------|----------|----------|----------|----------|--------------------|
| | | 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 | 10% | | ✓ | | | | | | |
| 期中考成績 Midterm Exam | 30% | ✓ | | | | | | | |
| 期末考成績 Final Exam | 30% | ✓ | | | | | | | |
| 作業成績 Homework and/or Assignments | 30% | | | ✓ | | | | | 口頭報告後並繳交 學其報告1篇 |
| 其他 Miscellaneous (_____) | | | | | | | | | |

評量方式補充說明

Grading & Assessments Supplemental instructions

期末報告一篇，期中、期末考 (take-home exam)。

期末報告：佔30%，

期中、期末考：各佔30%，

平時成績：佔10%

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.)

參考資料 (教科書)：

Hanley, N., J. F. Shogren and B. White, 1997, Environmental Economics: in Theory and Practice, Oxford University Press. (代理商未知，如無法買到，可能以印講義方式或以替代教材處理)

參考資料：將於課前通知，如有可能將放在網頁上供同學下載。

Freeman, A. M., III, 1993, The Measurement of Environmental and Resource Values, Washington DC: Resources for the Future.

Dorfman, R. and N. S. Dorfman, eds., 1993, Economics of the Environment: Selected Readings, 3rd Edition. New York: Norton.

等等……

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/~hclin/index.html>

其他補充說明 (Supplemental instructions)