



## 教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	環境經濟學		學年/學期 Academic Year/Semester	112/2
課程名稱(英文) Course Name in English	Environmental Economics			
科目代碼 Course Code	EC_D0180	系級 Department & Year	博士	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				
Presenting the contemporary framework of economic analysis concerning environmental policy, for example, 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：通曉經濟學的高階理論技巧，應用數學與賽局解決經濟議題的能力 Mathematical analysis skills: Mastering in advanced application of mathematical theories and game theory in analyzing economic issues			○
B	實證經濟分析能力：通曉經濟學的高階實證技巧，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 advanced application of statistics and econometrics in data collection and examination			
C	微觀經濟之闡釋能力：通曉高階個體經濟學相關的理論與應用 Microeconomic perspective: Thorough understanding of advanced microeconomic theories and relevant application			○
D	宏觀經濟之闡釋能力：通曉高階總體經濟學相關的理論與應用 Macroeconomic perspective: Thorough understanding of advanced macroeconomic theories and relevant application			○
E	自我調整適應社會之能力：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高階專業研究報告 Communication skills: Having a clear mind and profound ability in presenting advanced professional academic research			
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 課程介紹			
2	Hanley: the Economics Perspective on the Environment (Ch 1)			

3	Hanley: (Ch 1), Issues and Trend : Tim Jackson, Prosperity Without Growth, 2009, 2017	no class (2/27)
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)	
7	Basic Concepts:Market Failure (Hanley Ch 3)	
8	The Problem of Social Cost R. H. Coase Journal of Law and Economics, Vol. 3, Oct., 1960 (Oct., 1960), pp. 1-44.	no class (4/3)
9	期中考試週 Midterm Exam	Take-home exam, due next week in class
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. MumeY 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	

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	Final take-home exam will be posted 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 final 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:

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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)