

<b>課程名稱 (course name)</b>	產業創新與社會影響				
	Industrial Innovation and Social Influence				
<b>開課系所班級 (dept. &amp; year)</b>	通識教育中心	<b>學分 (credits)</b>	2	<b>規劃教師 (teacher)</b>	科管所 蘇信寧
<b>課程類別 (course type)</b>	必修	<b>授課語言 (language)</b>	中文或英文	<b>開課學期 (semester)</b>	上或下
<b>課程簡述 (course description)</b>	<p>本課程介紹產業演化與產業創新與其對社會的影響，透過科學、技術、創新、政策、智慧財產以及社會等面向之考慮，探討傳統技術升級與產業創新之策略如何影響社會，並帶動社會之和諧發展。</p> <p>This course aims to introduce social influence of industrial evolution and industrial innovation. How upgrading conventional industry and industrial innovation strategy impact modern society as well as how the development of society can be harmonized are investigated from the perspectives of science, technology, innovation, policy, intellectual property, etc.</p>				
<b>先修課程 (prerequisites)</b>	無				
<b>課程目標與核心能力關聯配比(%) (relevance of course objectives and core learning outcomes)</b>					
<b>課程目標</b>	<b>course objectives</b>			<b>核心能力 core learning outcomes</b>	<b>配比 合計 100%</b>
使學生瞭解產業演化與產業創新與其對社會的影響，以掌握全球重要產業之脈動與其社會經濟效益。	The objective of the course aims to help student understand how industrial evolution and industrial innovation influence social development, in order to realize global industrial development and its socioeconomic benefits.			人文素養	0%
				科學素養	0%
				溝通能力	25%
				創新能力	25%
				國際視野	25%
				社會關懷	25%
<b>課程目標之教學方法與評量方法 (teaching and assessment methods for course objectives)</b>					
<b>教學方法 (teaching methods)</b>			<b>學習評量方式 (evaluation)</b>		
講授、課堂討論			口頭報告、書面報告		

**授課內容 (單元名稱與內容、習作 / 考試進度、備註)****(course content and homework / tests schedule)**

本課程由基本理論與實務案例出發，介紹產業發展策略之形成、如何瞭解產業演化、產業創新，並評估其對社會之影響，內容包括：

1. 科技與創新政策簡介
2. 創新政策理論發展
3. 研發與創新思維
4. 創新策略規劃
5. 創新策略植入
6. 產業環境分析與評估
7. 全球產業發展概觀
8. 台灣產業升級契機—奈米科技產業、資訊通信產業、材料科技產業、生物科技產業、精緻農業產業、綠色能源產業、醫療照護產業、文化創意產業
9. 產業發展趨勢分析
10. 研發成果保護與社會影響—智慧財產權管理、專利佈局、專利地圖、專利價值、專利侵權
11. 產業升級與社會發展
12. 倫理與其他社會議題

**教科書與參考書目 (書名、作者、書局、代理商、說明)****(textbook & other references)**

1. 吳思華 (2000) 策略九說 (三版)，臺北：臉譜文化出版社
2. 創新與創業，國立高雄第一科技大學創新創業中心，華泰文化，2013-03-06
3. 陳介玄 (1998) “台灣產業的社會學研究：轉型中的中小企業”，臺北：聯經
4. 司徒達賢 (2000) “我國中小企業升級問題及對策”，經濟情勢暨評論季刊第五卷第四期
5. Strategic Management of Technological Innovation, Forth Edition by Mellissa A. Schilling
6. R. Duane Ireland, Robert E. Hoskisson, Michael A. Hitt (2010) The Management of Strategy: Concepts and Cases (nine edition)
7. Hitt, M.A., Ireland, R.D., Hoskisson, R.E. (2012) Strategic Management Cases: Competitiveness and Globalization.
8. Hill, C.W., Jones, G.R. (2007) Strategic Management: An Intergrated Approach.
9. Mumford (2006) The story of socio-technical design: reflections on its successes, failures and potential, Information Systems Journal, 16 (2006), pp. 317–342
10. Shin, D.-H., & Lee, C.-W. (2011). Disruptive innovation for social change: how technology innovation can be best managed in social context. Telematics and Informatics, 28(2), 86–100. doi:10.1016/j.tele.2010.08.002
11. T.S. Kuhn (1962) The structure of scientific revolutions, University of Chicago
12. R.N. Kostoff, M.B. Briggs, R.L. Rushenberg, C.A. Bowles, M. Pecht, D. Johnson, S. Bhattacharya, A.S. Icenhour, K. Nikodym, R.B. Barth, and others (2007) Comparisons of the structure and infrastructure of Chinese and Indian Science and Technology, Technological Forecasting & Social Change, vol. 74, pp. 1609–1630.
13. R.N. Kostoff, R.G. Koytcheff, and C.G. Lau (2007) Global nanotechnology research literature overview, Technological Forecasting & Social Change, vol. 74, pp. 1733–1747.
14. Y. Kajikawa, J. Yoshikawa, Y. Takeda, and K. Matsushima (2008) Tracking emerging technologies in energy research: Toward a roadmap for sustainable energy,” Technological Forecasting and Social Change, vol. 75, pp. 771–782.
15. J. Irvine and B.R. Martin (1984) Foresight in science: Picking the winners, Pinter London
16. Stuart, T. E., & Podolny, J. M. (1996) Local search and the evolution of technological capabilities. Strategic Management Journal, 17, 21-38
17. Hanel, P. (2006) Intellectual property rights business management practices: A survey of the

literature. *Technovation*, 26(8), pp. 895–931.

18. Dosi, G. (1982) Technological paradigms and technological trajectories: a suggested interpretation of the determinants and directions of technical change. *Research policy*, 11(3), 147-162.

課程教材（教師個人網址請列在本校內之網址）  
(teaching aids & teacher's website)

另行公告

課程輔導時間  
(office hours)

另行公告