

105 學年度 商學院 英語授課課程大綱

國立政治大學課程教學大綱

Syllabus

課程資訊		
學年學期 Academic Year / Semester	105 學年度第 1 學期	Fall Semester, 2016
開課單位 Course Department	科智碩一碩二	MSc Program Graduate Institute of Technology, Innovation & Intellectual Property Management, First & Second Year
課程名稱 Course Name	專利分析 (英語授課)	Patent Analysis (English Taught Class)
授課教師 Instructor	宋皇志	Huang-chih Sung
職稱 Title	專任助理教授	Assistant Professor
學分數 No. of Credits	3.0	3.0
修別 Type of Credit	選修	Optional
先修科目 Prerequisite(s)	智慧財產權法 & 智慧財產管理	Intellectual Property Laws & Intellectual Property Management
上課時間	二 EFG	Thu. EFG
上課地點	商學院 909	College of Commerce 909
點閱核心能力分析圖與授課方式比例圖		
課程簡介		
<p>This course covers world-wide patent searches, patent analysis, patent mapping and technology forecasting. Tea and bread will be used as two examples for students to learn how to conduct patent searches at the databases of U.S., Japan, European Patent Office, China, and Taiwan, and to learn how to use the results of patent searches to conduct a patent analysis, patent mapping and technology forecasting.</p>		
課程目標 Course Objectives		
<p>The students will learn how to conduct patent searches at the databases of U.S., Japan, European Patent Office, China, and Taiwan. The students will also learn how</p>		

to use the results of patent searches to conduct a patent analysis, patent mapping and technology forecasting, especially in the tea industry and the bread industry. The results of patent analysis, patent mapping and technology forecasting will be used as important references and guides for innovation in the tea industry and the bread industry.

學習成效

The students will be divided into two groups, one for the tea industry and the other for the bread industry. Each group will finish a patent search report, a patent analysis report, a patent map, and a technology forecasting report. The students will learn the tea and bread industries and experience the best way for an IP expert to participate and even lead the direction of research and development.

評分標準【明列評量項目與給分標準。提供評量尺規範例供參】 Evaluation

Class Participation 20%
Case Study and Homework 40%
Final Report 40%

學生學習投入時間 Time for Students to Participate

每週課堂教學時數： 3 小時
每週預習 / 複習時數： 12 小時

每週課程進度與作業要求 Weekly Course Schedule and Homework

【請詳述每週課程內容 / 授課方式與學生預習內容 / 學習活動 / 課後作業】

Week 1: Introduction to the technologies and industrial situations of tea and bread

Week 2: Introduction to patent searches at the databases of U.S., Japan, European Patent Office, China, and Taiwan (a homework of practicing a patent search will be assigned)

Week 3: Practice for patent research (finishing a patent search report)

Week 4: Introduction to patent analysis 1-- Using searched patent data to analyze technologies (reading assignment and discussion at class)

Tseng, F. M., Hsieh, C. H., Peng, Y. N., & Chu, Y. W. (2011). Using patent data to analyze trends and the technological strategies of the amorphous silicon thin-film solar cell industry. *Technological Forecasting and Social Change*, 78(2), 332-345.

Week 5: Introduction to patent analysis 2-- Using patent analysis to realize the competition between companies (reading assignment and discussion at class)

Chen, Y. S., & Chen, B. Y. (2011). Utilizing patent analysis to explore the cooperative competition relationship of the two LED companies: Nichia and Osram. *Technological Forecasting and Social Change*, 78(2), 294-302.

Week 6: Introduction to patent analysis 3—Patenting Strategy (reading assignment and discussion at class)

Weenen, T. C., Pronker, E. S., Commandeur, H. R., & Claassen, E. (2013). Patenting in the European medical nutrition industry: Trends, opportunities and strategies. *PharmaNutrition*, 1(1), 13-21.

Week 7: Introduction to patent analysis 4—Using patent statistics to evaluate technology (reading assignment and discussion at class)

Cho, I., & Park, M. (2015). Technological-level evaluation using patent statistics: model and application in mobile communications. *Cluster Computing*, 18(1), 259-268.

Week 8: Practice for patent analysis (finishing a patent analysis report)

Week 9: Visit at a factory of the tea industry

Week 10: Visit at a factory of the bread industry

Week 11: Introduction to patent mapping 1 (reading assignment and discussion at class)

Introduction to Patent Map Analysis, Japan Patent office.

Week 12: Introduction to patent mapping 2 (reading assignment and discussion at class)

Guide Book for Practical Use of Patent Map for each Technical Field, Japan Patent Office.

Week 13: Introduction to patent mapping 3 (reading assignment and discussion at class)

Guide Book for Practical Use of Patent Map for each Technical Field, Japan Patent Office.

Week 14: Practice for patent mapping (finishing a patent map)

Week 15: Introduction to technology & product forecasting-- Using patent information for designing new product and technology (reading assignment and discussion at class)

Lee, S., Lee, S., Seol, H., & Park, Y. (2008). Using patent information for designing new product and technology: keyword based technology roadmapping. *R&D Management*, 38(2), 169-188.

Week 16: Introduction to technology & product forecasting-- Patent analysis for technology-driven roadmapping (reading assignment and discussion at class)

Lee, S., Yoon, B., Lee, C., & Park, J. (2009). Business planning based on technological capabilities: Patent analysis for technology-driven roadmapping. *Technological Forecasting and Social Change*, 76(6), 769-786.

Week 17: Introduction to technology & product

forecasting—Technology-forecasting by patent data (reading assignment and discussion at class)

Altuntas, S., Dereli, T., & Kusiak, A. (2015). Forecasting technology success based on patent data. *Technological Forecasting and Social Change*, 96, 202-214.

Week 18: Practice for technology & product forecasting (finishing a technology & product forecasting report)

授課教師 Office Hours、地點

Monday 14:00-16:00

教學助理基本資料

The teaching assistant should help borrow and set up a notebook computer and a projector for each class.

指定 / 參考書目【為維護智慧財產權，請務必使用正版書籍】

1. Introduction to Patent Map Analysis, Japan Patent office.
2. Guide Book for Practical Use of Patent Map for each Technical Field, Japan Patent Office.
3. Several journal articles

課程相關連結

N.A.

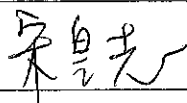
本課程附件

N.A.

課程進行中，是否禁止使用智慧型手機、平板等隨身設備。

The students should use their own notebook computer for practicing at class.

申請教師簽章：



開課單位主管簽章：

