



課 綱 Course Outline

企業管理學系博士班資訊管理組

中文課程名稱 Course Name in Chinese	資訊檢索				
英文課程名稱 Course Name in English	Information Retrieval				
科目代碼 Course Code	BM__83100	班 別 Degree	博士班 Ph. D.		
修別 Type	選修 Elective	學分數 Credit(s)	3.0	時 數 Hour(s)	3.0
先修課程 Prerequisite	程式設計、資料結構				
課程目標 Course Objectives					
本課程旨在對於資訊檢索做一廣泛性的介紹。課程內容包括介紹文件的呈現方式、term weighting、比較資訊檢索系統的判準、文字分類及叢集等。預期學生在修習完本課程後，能夠掌握資訊檢索領域的理論與應用，並對於現今資訊檢索領域所關注的議題有所認識及瞭解。本課程希望學生具備基本的程式語言能力以及嫻熟於資料結構，以利作業及專案實作的進行。					
系教育目標 Dept.'s Education Objectives					
1	培育具備資訊技術解決問題思維能力之高級人才 Cultivate senior personnel with the capability of information technology to solve problems with thinking skills				
2	以資訊技術為核心，培育具有高度專業能力之技術人才 Cultivate professional personnel with the capability of information technology				
3	以管理為對象，培育具有創新、研發、企劃整合能力之高級人才 Cultivate senior personnel with the capability of innovation, research and development and integrated planning				
4	提供數位內容、電子商務與知識管理所需之人才 Cultivate personnel with the capability of digital content, electronic commerce and knowledge management				
5	培育符合國家與區域發展所需之資訊管理人才 Cultivate information management personnel and regional to meet the needs of national development				
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	培育具備資訊管理相關理論與應用的知識 Cultivate the knowledge of information management application	
B	培育具備邏輯推演、問題解決與獨立研究的能力 Cultivate the capability of logical deduction, problem solving and independent research	●
C	培養具備資訊專業知識與技能 Cultivate the professional ability and skill regarding information	●
D	培養具備資訊科技與管理領域之知識整合應用能力 Cultivate the integrated ability regarding information technology and management	●
E	培養具備創新思維、領導智能與國際觀的能力 Cultivate the ability regarding innovative thinking, leadership and international view	○

圖示說明 Illustration : ● 高度相關 Highly correlated ○ 中度相關 Moderately correlated

課程大綱 Course Outline

(預定課程綱要將視學習成效調整內容與進度)

1. Term Vocabulary
2. PAT Tree and Chinese Keyword Extraction.
3. Term Weighting and Vector Space Model.
4. Evaluation in Information Retrieval.
5. Relevance Feedback and Query Expansion.
6. Probabilistic Information Retrieval.
7. Language Models for Information Retrieval.
8. Text Classification and Naive Bayes.
9. Vector Space Classification.
10. Flat Clustering.
11. Hierarchical Clustering.
12. Topic Detection and Tracking.
13. Web Search Basics.
14. Web Crawling and Indexes.
15. Link Analysis

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.)

具備資訊檢索與文字探勘相關專長之師資

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

(視學習成效調整內容與方式)

- 1 課堂講授 60%
- 2 資訊檢索系統操作 20%
- 3 期末專案實作 20%

其他 Miscellaneous

指定教材：

- 1 · Introduction to Information Retrieval / C.D. Manning, P. Raghavan, and H. Schütze / Cambridge University Press
- 2 · Modern Information Retrieval / Ricardo Baeza-Yates and Berthier Ribeiro-Neto / Addison Wesley
- 3 · Automatic Text processing - The Transformation, Analysis, and Retrieval of

Information by
Computer/G. Salton Addison Wesley
4 · Information Retrieval - Data Structures and Algorithms/W.B. Frakes and Ricardo
Baeza-
Yates/Prentice Hall
5 · Foundations of Statistical Natural language Processing/C.D. Manning and H. Sch?
tze/
The MIT Press