



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	高等資料庫管理系統				
英文課程名稱 Course Name in English	Advanced Database Management System				
科目代碼 Course Code	BM_80300	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	資料庫管理				
課程目標 Course Objectives					
(1) 培養學生將來進一步探討資料庫相關領域之研究的能力					
(2) 訓練學生將來有能力成為 "完全內行" 的高級資料庫管理師(DBA)					
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

- Unit 1: Introduction to DBMS
- Unit 2: DB2 and SQL
- Unit 3: The Relational Model
- Unit 4: The Hierarchy Model
- Unit 5: The Network Model
- Unit 6: File Organization and Access Methods
- Unit 7: Logical Database Design
- Unit 8: Database Recovery
- Unit 9: Concurrency Control
- Unit 10: Security and Integrity
- Unit 11: Query Optimization
- Unit 12: Distributed Database

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.)

具資訊管理專長之教師與DBMS開發工具。

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

1. 課堂授課與程式作業 2. 評分標準- 期中考:30%, 期末考:30%, 程式作業練習:40%

其他
Miscellaneous

1. Lecture Notes (edited by Prof. Wei-Pang Yang)
2. C. J. Date, "An Introduction to Database Systems," 8th edition, 2004.
3. Cited papers.