朝陽科技大學 095學年度第2學期教學大綱
Data Mining 資料探勘

當期課號	7433	Course Number	7433
授課教師	李金鳳	Instructor	LEE,CHIN FENG
中文課名	資料探勘	Course Name	Data Mining
開課單位	資訊科技研究所博士班一A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	資料探勘是一個多學科領域，從多個學科汲取營養。這些學科包括資料庫技術、人工智慧、機器學習、神經網絡、統計學、模式識別、知識庫系統、知識獲取、資訊檢索、高性能計算和資料視覺化。資料探勘是對資料的處理、分析及建立模式，以找出有意義的隱藏資訊。本課程的目的不在介紹資料探勘所發展的計算分析方法，也學習資料倉儲的相關技術。主要的內容包含資料倉儲的意義與建置方式，資料概念描述：特徵化與比較、分類、關聯技術、群集分析。	Objectives	Data Mining and Knowledge Discovery has become an active area of research, attracting people from several disciplines, including database systems, statistics, information retrieval, pattern recognition, AI/machine learning, and data visualization. The course will introduce data mining and data warehousing, and study their principles, algorithms, implementations, and applications. TOPICS: An introduction to data mining and data warehousing: motivation and applications. Basic data warehousing technology: data cube methods, data warehouse construction and maintenance. Basic data mining techniques: characterization, association, classification, clustering, and similarity-based mining. Advanced data mining applications: mining relational and transaction data, mining time-related data, spatial data mining, textual data mining, multimedia data mining, visual data mining, and Web mining.
教材	Data Mining: Concepts and Techniques, Jiawei Han and Micheline Kamber , Morgan Kaufmann Pub., 2000. Data Mining: Introductory and Advanced Topics, Dunham, Prentice Hall, 2002. Selected Journal or Conference Papers REFERENCES: Some recent conference/journal paper collection, (class distribution).	Teaching Materials	
成績評量方式	作業+報告+平時表現(出席率+上課Q&A)+其他、期中與期末考試、期末計畫書+專題報告+期末專題文件)。	Grading	Presentation+numbers of question+Assignments + Class presentation Midterm &Final termsProject and project documentation。
教師網頁			
教學內容	TOPICS: □ An introduction to data mining and data warehousing: motivation and applications. □ Basic data warehousing technology: data cube methods, data warehouse construction and maintenance. □ Basic data mining techniques: characterization, association, classification, clustering, and	Syllabus	OBJECTIVE/DESCRIPTION: Data Mining and Knowledge Discovery has become an active area of research, attracting people from several disciplines, including database systems, statistics, information retrieval, pattern recognition, AI/machine learning, and data visualization. The course will introduce data mining and data warehousing, and study their

	similarity-based mining. □ Advanced data mining applications: mining relational and transaction data, mining time-related data, spatial data mining, textual data mining, multimedia data mining, visual data mining, and Web mining.		principles, algorithms, implementations, and applications.