朝陽科技大學 093學年度第1學期教學大綱
Neural Networks and Its Applications 類神經網路

當期課號	7796	Course Number	7796
授課教師	謝政勳	Instructor	HSIEH,CHENG HSIUNG
中文課名	類神經網路	Course Name	Neural Networks and Its Applications
開課單位	資訊工程系碩士在職專班一A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	Fundamental concepts and models of artificial neural systems Single-layer perception classifiers Multilayer feedforward networks Associative memories Matching and self-organizing networks Applications of neural algorithms and systems Neural networks implementation	Objectives	Fundamental concepts and models of artificial neural systems Single-layer perception classifiers Multilayer feedforward networks Associative memories Matching and self-organizing networks Applications of neural algorithms and systems Neural networks implementation
教材	1. M. T. Hagan, H. B. Demuth, Neural Network Design, Thomson Learning, 1996. (新月圖書代理) 2.S. Haykin, Neural Networks-A Comprehensive Foundation, 2nd Edition, Pretice Hall, 1999. (開發圖書代理)	Teaching Materials	
成績評量方式	期中考30%，期末專題30%，作業20%，專題口頭報告20%	Grading	Midterm Exam. 30%, Project 30%, Homeworks 20%, Oral Presentation 20%
教師網頁	_		
教學內容	1. Introduction Perceptron 2. Widrow-Hoff Learning Backpropagation 3. Associative Learning Competitive Networks 4. Adaptive Resonance Theory (ART) Hopfield Network 5. Recurrent Neural Networks 6. Neural Networks with Other AI Schemes (e.g. GA, Fuzzy) 7. Applications of Neural Networks	Syllabus	1. Introduction Perceptron 2. Widrow-Hoff Learning Backpropagation 3. Associative Learning Competitive Networks 4. Adaptive Resonance Theory (ART) Hopfield Network 5. Recurrent Neural Networks 6. Neural Networks with Other AI Schemes (e.g. GA, Fuzzy) 7. Applications of Neural Networks