朝陽科技大學 099學年度第1學期教學大綱
Time Series Analysis 時間序列分析

當期課號	7023	**Course Number**	7023
授課教師	方世詮	**Instructor**	FANG,SHIH CHUAN
中文課名	時間序列分析	**Course Name**	Time Series Analysis
開課單位	財務金融系碩士班二A	**Department**	
修習別	選修	**Required/Elective**	Elective
學分數	3	**Credits**	3
課程目標	本課程主要介紹分析時間序列資料的基本理論與應用方法。內容有穩定序列的自相關函數(ACF)、偏自相關函數(PACF)與ARMA模型的選模方法，至於非穩定序列，其數學性質也將有所討論。同時，對於非線性的時間序列，如ARCH，GARCH等，也將一併介紹。最後，將所學方法應用在分析實際財金資料。	**Objectives**	This course would give the basic theory and methods for application about analyzing time series data. The content include auto-correlation function , partial auto-correlation function and model selection problem of ARMA model, of stationary process. As non-stationary series, its mathematical properties would also be discussed. The option part is about nonlinear time series model, like ARCH and GARCH models. Finally, real financial data sets are analyzed by using our methods.
教材	Walter Enders (1995) Applied Econometric Time Series, Wiley	**Teaching Materials**	Walter Enders (1995) Applied Econometric Time Series, Wiley
成績評量方式	平時成績 25% 作業 30% 期末報告 45%	**Grading**	Class Participation 25% Homework 30% Term Paper 45%
教師網頁	http://lms.ctl.cyut.edu.tw/2001092		
教學內容	本課程內容主要在於介紹分析時間序列資料的基本理論與應用方法。本課程的教學將著重在實際財金資料的應用分析之上。內容由時序的自我相關函數(ACF)、偏自我相關函數(PACF)到ARMA模型，ARCH模型，GARCH模型等，均將完整地擇重點介紹。	**Syllabus**	This course provides the basic theory and analying method for empirical financial time series data. It places the more weights on the empirical data analysis. The content includes auto-correlation function , partial auto-correlation function , ARMA model, ARCH model, and GARCH model.