NANYANG TECHNOLOGICAL UNIVERSITY
School of Humanities and Social Sciences
Division of Economics
Semester 1, Academic Year 2014-15

1 Course Description

This course introduces students to econometric time series techniques that are widely used to analyse economic and financial data. The course prepares students for more advanced study in this area, as well as in applying these techniques to empirical studies. Topics covered include stationary and nonstationary univariate time series modeling, multi-equation time-series models and volatility modeling.

2 Course Outline

Week No.	**Topic**	**Reference**
1 & 2 12/8/2014 19/8/2014	Univariate Time Series Models -Autoregressive processes -Moving average processes -Mixed processes -Forecasting	Enders Chap. 1 & 2
3 - 5 26/8/2014 2/9/2014 9/9/2014	Modeling volatility - ARCH Models - GARCH Models - Estimation and Testing	Enders Chap. 3
6 & 7 16/9/2014 23/9/2014	Nonstationary processes - Trend - Unit root tests - Structural breaks	Enders Chap 4
8	RECESS WEEK	
9 - 11 7/10/2014 14/10/2014 21/10/2014	Vector Autoregressive Processes - Representation of the system - Granger causality - Impulse response analysis - Variance decomposition	Enders Chap 5
12 - 13 28/10/2014 4/11/2014	Cointegration - Definition and properties - Cointegration in single equation models - Cointegration in VAR	Enders Chap 6

3 Basic Text

Enders W.
Applied Econometric Time Series (3rd Ed.)
John_Wiley (2010)
NTU Library Call Number: HB139.E56 2010

4 Method of Instruction

Seminars: 3 hours per week
Lectures commence in Week 2 and end in Week 13.

5 Course Assessment

Class Quiz (Week 10)	30%
Final examination	70%
Total	100%

6 Instructor

Name	Low C.K.
Office	HSS-04-84
Tel	6790 4706
Email	acklow@ntu.edu.sg