

Course : Applied Time Series Analysis

Textbook :” Time Series Analysis and its Applications” by YEH, Hsiaw-Chan, 3rd ed. (2006)

Reference : G. Box, G. Jenkins, G. Reinsel: Time Series Analysis, Forecasting and Control. (3rd. ed.). (1994)

Computer Packages : SCA, SAS, MINITAB.

Contents :

- (1) Introduction: Review Elementary Statistics (1 wk)
- (2) Stationary Time Series Models (2 wks)
- (3) Nonstationary Time Series Models (1 wk)
- (4) Model Identification, Estimation and Testing (3 wks)
- (5) Seasonal Time Series Models (1 wk)
- (6) Forecasting (1 wk)
- (7) Transfer Function Models (2 wks)
- (8) Multiple Time Series Models (2 wks)
- (9) Intervention and Outliers (1 wk)
- (10) ARCH, GARCH, EGARCH Models (1 wk)

Grades : Midterm(40%) 、Final(40%) 、Report(20%)