Title: 財務統計專題

Instructor: Hwai-Chung Ho 何淮中

TEL: 27835611 #112 Email: hcho@stat.sinica.edu.tw

Text Book: Modeling Financial Time Series by Stephen J. Taylor, John Wiley, 2008

References: 1. Analysis of Financial Time Series by Ruey S. Tsay, John Wiley, 2002.

2. Asset Price Dynamics, Volatility, and Prediction by Stephen J. Taylor, 2005, Princeton University Press, 2005.

Hours: Wednesday 2:20 pm – 5:20 pm

Classroom: Room 303, 2nd Management Building

Examination: Oral presentation for final exam.

Course outlines:

- *Introduction
- *Basic models: ARMA(1,1) and linear processes
- *Modeling and forecasting of volatility: Stochastic volatility and GARCH models
- *Testing the random walk hypothesis
- *Price trend models and trading strategy
- *Supplementary topics:
 - 1.Long-memory time series
 - 2. extreme value theory and value at risk

Lecture Notes will be distributed during the class.