Financial Time Series

Fall 2007 Department of International Business National Taiwan University

Instructor: Dr. Yaowen Hsu Office: Room 809, Building 2, College of Management Phone: 33664981 Email: yhsu@management.ntu.edu.tw Class hours: Tuesday 2:20 pm – 5:20 pm Office hours: By appointment

References:

- 1. Hamilton, James D., 1994, *Time Series Analysis*, Princeton.
- 2. Johnston, Jack and John DiNardo, 1997, *Econometric Methods*, 4th ed., McGraw-Hill.
- 3. Tsay, Ruey S., 2005, Analysis of Financial Time Series, 2nd ed., Wiley.
- 4. Kolmogorov, A.N. and S.V.Fomin, 1970, Introductory Real Analysis, Dover.

Course Objective:

This course is designed to expose students to general principles in financial econometrics, with an emphasis on time series. This course will cover (1) Difference Equations and Lag Operators, (2) Stationary ARMA Processes, (3) Forecasting, (4) Maximum Likelihood Estimation, (5) Asymptotic Distribution Theory, and (6) Linear Regression Models.

If time allows, we will also cover (1) Set Theory, (2) Metric Spaces, and (3) Topological Spaces, using the Kolmogorov and Fomin title.

Grading Policy:

1. The course grades will be based on the following elements:

Tests	60%
Class Participation	20%
Homework	20%