# STAT 3490
# Time Series Analysis
# Winter 2012

**Instructor:**

Dr. A. Thavaneswaran
326 Machray Hall
PH: 474-8984
Email: thavane@cc.umanitoba.ca

**Office Hours:** Monday, Wednesday, Friday 9:30-10:30 a.m.
(or by appointment)

**Class Time:** Slot 1, 8:30-9:30 a.m. Monday, Wednesday, Friday

**Text:** *Statistical Methods for Forecasting,* by Abraham, B. and Ledolter, J. (1983). Published by John Wiley.

**Topics:** This course will cover some topics in time series analysis. After briefly reviewing the standard regression theory, the theory and application of time series techniques will be studied. Topics will be selected from the following list (and with luck, will include them all):

- Fundamental Concepts
- Stationary and nonstationary time series models, autocorrelations, partial autocorrelations, model identification, forecasting, and estimation (Chapter 5)
- Seasonal time series models (Chapter 6)

**Assignments:** There will be five assignments, and some problems will be marked. There will be two midterm tests.

Additional (ungraded) exercises will be given frequently in class. Some of the assignment questions will be taken from these. Success in this course depends strongly on the problem-solving skills you will develop from doing these exercises. For the same reason, your work on assignments should be essentially an "individual effort."

**Mark Breakdown:**

| | |
|---|---|
| Assignments | 10% |
| Mid-Term Test 1 (Feb. 10th) | 20% |
| Mid-Term Test 2 (Mar. 09th) | 20% |
| Final Exam (TBA) | 50% |

**Voluntary Withdrawal:** March 16, 2012

**Academic Dishonesty:** It is important that you understand what constitutes academic dishonesty and that you are familiar with the very serious consequences. Links to resources that that describe academic dishonesty (including plagiarism, cheating, inappropriate collaboration and examination impersonation) can be found at: umanitoba.ca/science/student/webdisciplinedocuments.html or through the Faculty of Science home page at: www.umanitoba.ca/science. Typical penalties imposed within the Faculty of Science for academic dishonesty are also described.