## McGill University Department of Economics Econ 467D2: Econometrics Winter 2008 Course outline

Professor: Jean-Marie Dufour

January 2008

This course is the sequel to ECON 467D1 given by Professor Russell Davidson during the Fall 2007 semester. The basic textbook is the same, but additional or modified material will be presented in the lectures.

Documents and other material relevant to the course will be available form my web page:

http://www.jeanmariedufour.com

Lecture hours: Monday 16:05 - 17:25; Wednesday 16:05 - 17:25. Room: Leacock Building 14. Beginning: January 3, 2008. End: April 11, 2008. Teaching assistant: Mirza Trokic e-mail: jean-marie.dufour@mcgill.ca

Evaluation will be based on 3 elements:

- 1. a mid-term exam (February or beginning of March 2008);
- 2. assignments;
- 3. final exam (April 2008).

As in the first half of the course, the marking scheme is such that the final grade for the term will be  $(-1) = 10^{-10}$ 

$$Grade = \max\left(F, \frac{F+M}{2}, \frac{F+(M+A)/2}{2}\right)$$

where F is the grade on the final exam (April), M that on the midterm, and A a composite grade for the assignments. The main rule is that you cannot do worse on the entire term than what you get for the final exam.

## **Recommended text**

The main reference for this course is the textbook:

**DM2004** Davidson, R. et J. G. MacKinnon (2004), *Econometric Theory and Methods* (ETM), Oxford University Press, Oxford.

## Autres livres utilisés / Other books used

- Am1985 Amemiya, T. (1985), Advanced Econometrics, Harvard University Press, Cambridge, Massachusetts.
- **GM1989** Gouriéroux, C. et A. Monfort (1989), Statistique et modèles économétriques, Volumes 1 et 2. Economica, Paris.
- **GM1995** Gouriéroux, C. et A. Monfort (1995), Statistics and Econometric Models, Volumes 1 and 2. Cambridge University Press, Cambridge, U.K.. English translation of previous book.
- **Rao1973** Rao, C. R. (1973), Linear Statistical Inference and its Applications, Second Edition, Wiley, New York.
- White1984 White, H. (1984), Asymptotic Theory for Econometricians, Academic Press, Orlando, Florida.

## **Readings and main references**

The symbol \* represents required readings. Photocopied lecture notes also constitute required reading.

1. Introduction to time series models

Lecture notes DM2004 – Section 7.6 Chap. 13

2. Generalized least squares and related topics

DM2004 - Chap. 7

3. Instrumental variables methods

DM2004 - Chap. 8

4. Generalized methods of moments

DM2004 - Chap. 9

5. Multivariate models

DM2004 - Chap. 12

6. Methods for stationary time series data

DM2004 - Chap. 13

7. Unit roots and cointegration

DM2004 - Chap. 14

8. Discrete and limited dependent variables

DM2004 - Chap. 11

9. Testing the specification of econometric models

DM2004 - Chap. 15