McGill University Department of Economics Econ 467D2: Econometrics Winter 2009 Course outline

Professor: Jean-Marie Dufour January 2009

This course is the sequel to ECON 467D1 given by Professor John Galbraith during the Fall 2008 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 from my web page:

http://www.jeanmariedufour.com

Lecture hours: Monday 14:35 - 15:55; Wednesday 14:35 - 15:55. Beginning: January 5, 2009.

End: April 14, 2009. Study break: February 22-28, 2009. Room: Leacock 14.

Office hours: Wednesday 17:00 - 18:00 (or by appointment)

Teaching assistants: Mirza Trokic, Hui Jun Zhang, Dalibor Stevanovic

TA sessions: Wednesday 16:00 - 17:00; Friday 13:30-14:30

 $\textbf{e-mail}: \verb"jean-marie.dufour@mcgill.ca"$

Evaluation will be based on 3 elements:

- 1. a mid-term exam (February or beginning of March 2009): 10% (non-detrimental); date: Wednesday March 4, 2009;
- 2. assignments: 15%;
- 3. a final exam (April 2009): 25% (35% if the mid-term grade is lower the final grade).

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.

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. Additional material on linear regression
- 3. Generalized least squares and related topics

DM2004 - Chap. 7

4. Instrumental variables methods

DM2004 - Chap. 8

5. Generalized methods of moments

DM2004 - Chap. 9

6. Multivariate models

DM2004 - Chap. 12

7. Methods for stationary time series data

DM2004 - Chap. 13

8. Unit roots and cointegration

DM2004 - Chap. 14

9. Discrete and limited dependent variables

DM2004 - Chap. 11

10. Testing the specification of econometric models

DM2004 - Chap. 15