McGill University Department of Economics Econ 469: Econometrics Winter 2010 Course outline

Professor: Jean-Marie Dufour January 10, 2010

This course is a sequel to ECON 468 given during the Fall 2009 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

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Lecture hours: Monday 14:35 - 15:55; Wednesday 14:35 - 15:55.

Beginning: January 4, 2010. End: April 14, 2010.

Study break: February 21-27, 2010. Easter holiday: April 2-5, 2010. Room: Burnside Hall 1B39.

Office hours: Monday 17:00 - 18:00 (or by appointment)
Teaching assistants: Xin Liang, second TA possible (TBA)

TA sessions: to be determined

e-mail: jean-marie.dufour@mcgill.ca

Evaluation will be based on 3 elements:

- 1. a mid-term exam (February or beginning of March 2010): 20% (non-detrimental); date: Wednesday March 1, 2010;
- 2. assignments: 30%;
- 3. a final exam (April 2009): 50% (70% if the mid-term grade is lower the final grade).

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/students/srr/honest/) for more information).

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site www.mcgill.ca/students/srr/honest/).

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.
- White 1984 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

4. Instrumental variables methods

5. Generalized methods of moments

6. Multivariate models

7. Methods for stationary time series data

8. Unit roots and cointegration

9. Discrete and limited dependent variables

10. Testing the specification of econometric models