ECON 337   Introductory Econometrics I

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Hours: See post on WEB-CT or office door

Textbook: Some material will be on WEB CT. *Introduction to Econometrics* by Stock and
                Watson has been ordered by Paragraphe Book Store

Students should have the equivalent of ECON 227 (Economics Statistics) to take this course,
namely familiarity with basic probability, hypothesis testing, and an introductory knowledge of
regression and correlation. Some knowledge of matrices and calculus is desirable

Topic

1.   Introduction, review of matrices
2.   Introduction to regression analysis, least-squares estimators
3.   Design matrices, hat-matrices, leverages, VIF, standard errors of coefficients by hand
        computation
4.   Computation and interpretation of all the numbers in MINITAB printouts for simple and
        multiple regression.
5.   Transformations to linearity, finite-difference method.
6.   Regression through the origin
7.   Inference and prediction, discrete random variables in regression
8.   Heteroscedasticity, autocorrelation
9.   Durbin-Watson statistic, Cochrane-Orcutt prodedure.
10.   Brief introduction to time series
11.   Examples of seasonality handled by multiplicative seasonal index numbers, and by indicator
        variables in multiple regression
12.   Maximum likelihood, Logistic Regression: Logit, Probit

        Evaluation: Assignments   15
                        Midterm Examination   25
                        Final Examination   60

Students should have a calculator capable of statistics computations with two-variable capacity.
There will be work done on the computer using MINITAB and EXCEL.

Work may be presented in English or French.

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meaning and consequences of cheating, plagiarism and other academic offences under the
Code of Student Conduct and Disciplinary Procedures (see http://www.mcgill.ca/integrity
for more information).