EC228: Econometric Methods, Spring 2014

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Class: TTH 3:00 – 4:15 pm, Campion 328.

This course introduces students to econometrics a subfield of economics concerned with methods for measuring economic quantities and testing economic theory. In particular, the course focuses on estimation and inference within the framework of linear regression analysis.

Prerequisites: EC151 or EC155, MT100 or MT102, or equivalent.


Grading:
- Homeworks every 2 weeks (20%).
- Midterm exam, February 27 (20%)
- Final exam, probably May 6 (40%)
- Associated labs (20%)

There will not be rescheduled or make-up examinations. Homework assignments will not be accepted passed their due dates. You must demonstrate your reasoning and show all calculation to receive full grade. The grading includes the results of the compulsory labs through which students will gain practical experience and familiarity with statistical software such as STATA. The labs are taught and graded by Rossella Calvi, Jin-Young Choi, and Ivan Petkov.

Academic Integrity: Boston College values the academic integrity of its students and faculty. It is your responsibility to familiarize yourself with the university’s policy on academic integrity: www.bc.edu/integrity. If you have any questions, always consult your professor. Violations of academic integrity will be reported to your class dean and judged by the academic integrity committee in your school. If you are found responsible for violating the policy, penalties may include a failing grade as well as possible probation, suspension, or expulsion, depending on the seriousness and circumstances of the violation.

Course Outline:

1. Introduction to econometrics and economic data (chapter 1)
2. Review of probability (Appendix B)
3. Review of statistics (Appendix C)
4. Simple regression analysis (chapter 2)
5. Multiple regression analysis: estimation (chapter 3)
6. Multiple regression analysis: inference (chapter 4)
7. Multiple regression analysis: OLS asymptotics (chapter 5)
8. Multiple regression analysis: further issues (chapter 6)
9. Multiple regression analysis: binary variables (chapter 7)
10. Heteroskedasticity (chapter 8)
11. Specification and data issues (chapter 9)

If time permits:
12. Regression analysis with time series data (chapter 10)
13. Serial correlation and heteroskedasticity in time series regression (chapter 12)
14. Instrumental variables estimation and two stage least squares (chapter 15)