# ECONOMICS 2311: Empirical Methods in Economics I (Section 1) Spring 2012

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T&Th 10:00-11:30am
T(Lecture) & Th (Lecture or Lab), 12:30-1:45pm, Monteith 203

#### **Course Description:**

Economics 2311 is a semester long course in introductory econometrics. Econometrics is the art and science of the estimating and testing of economic models. These estimated models can then be used for causal inference and prediction. The course will focus on multiple regression methods for analyzing data in economics and related disciplines. The objective of the course is for the student to learn how to conduct – and how to critique – empirical studies in economics and related fields. Accordingly, the emphasis of the course is on empirical applications. The mathematics of econometrics will be introduced only as needed and will not be a central focus.

**Prerequisites**: ECON 1200 or both 1201 and 1202; and MATH 1071Q or 1110Q or 1121Q or 1131Q; and STAT 1000Q or 1100Q.

### **Required Textbook:**

Jeffrey Wooldridge, *Introductory Econometrics: A Modern Approach*, 4th edition. Appendix A and B of the text contain a useful summary of the prerequisites. The book is not a substitute for lectures so please do not miss class.

#### Homework, Exams, Grading:

There will be five homework sets and three computer exercises. Learning by doing is extremely important in econometrics courses, as with most math. Students who take the homework seriously should have little trouble with the exams. While student cooperation and discussion is encouraged, homework assignments, including computer work, must be the work of the student whose name appears on them (i.e., your own). Homework will be collected at the beginning of the section on the due date. Late homeworks will not be accepted. The midterm I exam will be in class on Thursday Feb 23rd. The midterm II exam will be in class on Thursday Feb 23rd. The midterm II exam will be in class on Thursday March 29th. The final exam is TBA. Grades will be based on homework assignments (15%), the midterms (35%) and the final exam (50%). In the two midterms only the highest scoring one will count. If you miss both you will get a zero for the midterm score. The final exam is compulsory to pass the course. Please make sure that you do not miss it. There are no make-up exams unless the circumstances happen to be really extraordinary. Computer exercises will require you to use the econometrics package STATA available in Monteith 203. Stata tutorial will be given on Thursday's class.

## **Course Outline**

- Introduction and review of statistics: Appendix A and B
- Simple linear regression: Chapters 1 and 2
- Multiple linear regression and related issues: Chapters 3, 4, 6, and 7
- Instrumental Variables Estimation and Two Stage Least Squares: Chapter 15
- Simultaneous Models Equations: Chapter 16
- Heteroscedasticity and serial correlation (Optional)