Purpose: This course emphasizes the tools of modern microeconometrics. Our focus will be on intuition and practical matters involved in modern econometric work. While we will only focus on proofs and derivations when doing so helps with intuition, anyone interested in a more formal treatment is welcome to discuss these issues with me outside of class. The first half of the semester will focus on some extensions of the first econometrics course, including weakening the assumption of iid errors as well as handling limited dependent variables. The focus of the second half will be modern attempts to isolate causal effects in observational data. We will use Stata to gain hands on experience with these tools.

Lectures: Lectures will be held on Mondays from 9-11 a.m. and Thursdays from 4-5 p.m. in Commerce Room 337.

Contact Details: Jon Klick can be reached at jonathan.klick@canterbury.ac.nz  
Office hours: Monday 1:30-3:30 p.m. or by appointment  
Office: 511A  Office Phone: 364-3369


Format: We will generally cover the lecture material on the Monday session and then use the Thursday session to go over Stata implementation and programming of the material. For weeks that problem sets are posted, we will cover those problems, so you are likely to benefit substantially from working through the problems on your own before the Thursday class.

Grading: The course grade is determined by the student’s performance on the following assessments with the relevant weights shown in parentheses: 1) exam #1 (20%); 2) writing assignment (20%); 3) exam #2 (20%); and 4) comprehensive final exam (40%).

Under no circumstances will extra credit be awarded, so make the most of these opportunities. Each opportunity is described below.

Exam #1: This exam will occur on August 18, 2010 from 4:00 – 6:00 pm. It will be a computer based exam.
Writing Assignment:

Most of the class will examine media coverage (newspaper, magazine, etc.) of an econometric study. The student will track down the original study, providing the following elements: 1) a description of the conclusion as it is covered in the popular media; 2) a description of the original research article’s hypothesis, empirical design, results, and conclusions; 3) criticisms of the research design in terms of the potential for omitted variable bias; 4) feasible suggestions regarding how to remedy the criticisms described in #3; and 5) a discussion of any divergence between the actual description of the study’s conclusions and the media’s coverage of the conclusion. While there are no length guidelines for these papers, it is almost surely the case that 1-5 can be handled effectively in 10-20 double spaced pages. Grades will be affected by the student’s understanding of econometric issues, the quality and creativity of the suggested remedies in #4, and the clarity of the student’s communication of the relevant issues. The student should attempt to avoid jargon and terms of art, instead relying on intuitive discussions of the underlying issues.

Honors students will instead formulate a hypothesis, collect data relevant to that hypothesis, and test the hypothesis using econometric tools. The paper need not be long, but the research design should show some attempt to avoid omitted variables bias problems. The paper also must clearly highlight the strengths and the weaknesses of the research design. Of course, the student will not be graded on whether she “finds significant results or not,” but the paper must present a plausible design using data that are well suited to the research question. Clarity of communication will affect the paper’s grade.

Papers are due by 11:59 p.m. on October 14, 2010. Submit them by email to jonathan.klick@canterbury.ac.nz.

Exam #2: This exam will occur on October 6, 2010 from 4:00 – 6:00 pm. It will be a computer based exam.

Final Exam: The final exam is comprehensive but not computer based.

Test Re-Grading Policy:

For each problem that you want re-graded, present the reason you believe you deserve more points on that problem. Your arguments should be presented on a separate sheet of paper. I will read your reason and if it sounds reasonable, I will
re-grade the entire test, leaving open the possibility that the point total on any question may go up or down depending on the reevaluation. Note that each test can only be re-graded once. The deadlines to have your test re-graded are given below. I will not consider re-grade requests after these dates:

Last day test can be handed in for re-grading:
Exam #1 Monday, October 4, 2010
Exam #2 Sunday October 31, 2010 (note, after October 14, any re-grade requests must be sent via email with scanned copies of the entire exam)

Problem Sets:

Many weeks, problem sets will be posted on the web at http://www.law.upenn.edu/fac/jklick/NZ324.html. While these problem sets are voluntary, their completion is likely crucial to a student’s performance on the course exams.

Make Up: As seen in the course schedule below, we will miss a total of 3 hours of class due to my traveling to and from New Zealand. We will make this time up through a 3 hour review session scheduled during the last week of the semester.

Schedule:

July 12, 2010: No Class (to be made up later)
July 15, 2010: Introduction/Review of what we know
July 19, 2010: Heteroskedasticity (Wooldridge Ch. 8)
July 22, 2010:
July 26, 2010: Dependence (Wooldridge Ch. 12)
July 29, 2010:
August 2, 2010: Other Problems (Wooldridge Ch. 9)
August 5, 2010:
August 9, 2010: Limited Dependent Variable Models (Wooldridge Ch. 17)
August 12, 2010:
August 16, 2010: Event Studies (Klick and Sitkoff)
http://www.law.upenn.edu/fac/jklick/108CLR749.pdf; also browse Gelbach, Helland, and Klick
August 18, 2010: Exam #1 4:00 – 6:00 pm
August 19, 2010:
August 23, 2010: No Class (university break)
August 26, 2010: No Class (university break)
August 30, 2010: No Class (university break)
September 2, 2010: No Class (university break)
September 6, 2010: Causal Inference
September 9, 2010: No Class (to be made up later)
September 13, 2010: Instrumental Variables (Wooldridge Ch. 15)
September 16, 2010:
September 20, 2010: D-in-D/Fixed Effects/DDD (Wooldridge Ch. 13 and Ch. 14)
September 23, 2010:
September 27, 2010: Regression Discontinuity
September 30, 2010:
October 4, 2010: Matching
October 6, 2010: Exam #2 4:00 – 6:00 pm
October 7, 2010:
October 11, 2010: Quantile Regression
October 14, 2010: Paper due by email by 11:59 p.m.