Course Outline

Economics 773/4 **Economic Policy Analysis 1+2** **Winter 2019**

Instructor: Dr P. Contoyannis

Location and Times: Monday 6.00-7.30 KTH 334
Wednesday 6.00-7.30 KTH 334

(except computing classes: held in the PEDAL lab:
L.R. Wilson Hall, Rm 5022) by

Lars Nielsen: pedal@mcmaster.ca 9th, 16th, 23rd Jan

and

Mahbub Rahman: rahmanmm@mcmaster.ca dates TBA

This course combines 2 courses (there were previously 2
different instructors for 773 and 774) and runs (with breaks
for reading week and the exam period) until May 31st.

You should register for 773 and 774 separately but will
receive the same grade for 773 and 774.

Contact Information: Contoyannis: contoyp@mcmaster.ca

Department of Economics, KTH 416 x 26582
Office hours: Mon 4-5, Wed 12.30-1.30 or by appointment

I will use Avenue to Learn to post material and you should
check this daily for updates.

Pre-requisites: Econ 761 or 6G03 and MAEP Graduate student standing in the
Department of Economics.

Course Description

This course is designed to develop skills in evaluating and doing economic policy
analysis. Its primary goals are:

1) to develop the ability to analyze critically the policy relevant research of others,
2) to develop the ability to present a critical review of policy relevant research to
specialist and non-specialist audiences,

3) to develop the ability to perform policy relevant empirical research.

This course covers popular methods to estimate causal effects in the (micro) economics literature. I will focus on experimental and micro-econometric approaches to estimating policy relevant treatment effects. These are known in the broader social science literature as 'program evaluation' techniques. I will emphasize why these methods are used when attempting to answer causal questions, focusing on issues encountered in actual data analysis.

Brief Content

We will begin by answering 2 initial questions:

1) What is (economic) policy?
2) How is (economic) policy determined in Canada?

We then move to discuss the use of both theory and data in providing policy relevant evidence. A series of lectures and discussions will develop the student's knowledge of experimental and observational data methodologies. We then move to explicitly consider a series of approaches to estimating causal effects: Randomization, Ordinary Least Squares (OLS) and Generalized Least squares (GLS), Matching and the use of propensity scores(PSM), Instrumental Variables (IV), Difference in Difference (DiD) and other panel data estimators such as fixed (FE) and random effects (RE) and, time permitting, regression discontinuity (RD) designs. We will also discuss issues of clustering and weighting. Throughout the course we will discuss empirical studies using these methods and consider their implementation in STATA. At the end of the course students should be able to critically evaluate a set of policy relevant analyses and have developed the ability to perform a policy relevant empirical analysis of their own.

Readings

We will use as our primary reference:

Angrist. JD. and Pischke. J-S (2009) *'Mostly harmless Econometrics'* **Princeton**

Other texts I will sometimes refer to are:

Cameron. C. and Trivedi. P. (2005*) 'Microeconometrics: Methods and Applications'* **Cambridge**

Morgan. S and Winship.C (2015) '*Counterfactuals and Causal Inference: Methods and Principles for Social Research*' 2nd edition Cambridge

Pearl. J, Glymour. M, Jewell N.P (2016) *'Causal Inference in Statistics : A Primer'* Wiley

There are a number of other graduate and undergraduate econometrics texts that I may refer to and you may want to refer to. Ask me if you want guidance on these.

For the computing classes we will use:

Cameron. C and Trivedi. P (2008) *Microeconometrics using STATA*,

These core materials will be supplemented by chapters from other texts and articles which I will either post on Avenue to Learn or distribute in class.

Educational Methods

The course is divided into sessions each lasting 1 1/2 hours. The first 3 weeks will be devoted to lectures (Mondays) and computing sessions (Wednesday). The remainder of winter term will be devoted to lectures, team presentations on empirical papers, and 4 computing sessions using STATA. After the April exam period we will have a number of sessions where students bring current issues with their paper for class feedback and discussion, while student presentations of their empirical paper will be scheduled in mid-late May.

Schedule and Topics

JAN 7, 9	Intro, PEDAL
JAN 14, 16	Discussion, PEDAL
JAN 21, 23	Lecture, PEDAL
JAN 28, 30	Lectures
FEB 4, 6	Lectures
FEB 11, 13	Lectures
FEB 18, 20	READING WEEK
FEB 25, 27	Lectures
MAR 4, 6	Lectures
MAR 11, 13	Lectures
MAR 18, 20	Lectures
MAR 25, 27	Lectures
APR 1,3	Lectures
Remainder of April	EXAM PERIOD
MAY	Consultations/Presentations
June 14th	Submit FINAL PAPER

Evaluation of Students

Your grade will depend on

1) your 20-25 page policy relevant empirical paper (The paper should be written with a focus on the policy implications of your analysis and should also include a 2-3 page non-technical summary which is appropriate for the non-specialist(50%),

2) your individual paper presentation (10%),
3) 2x team paper presentations (5% each),
4) a STATA assignment (10%),
5) 2 quizzes (5% each) (I will give you at least 1 week notice when we are close to covering the material!) and
6) in-class contribution including attendance (10%).

The evaluation components are as follows:

1. **Empirical paper** on a policy relevant topic of your choice **(50%)**

   There are a number of intermediate steps related to this assignment:

   a) Submit a one-page statement of your policy relevant question and your empirical approach **(by February 13th)**
   b) Meet to discuss and agree (**by March 8th**)
   c) Present in class **(mid-late May)**
   d) Submit paper**. (by June 15th)**

All papers must include appropriate referencing of all works cited with full acknowledgement of other people's ideas. You should ensure that you are familiar with university policies and procedures relating to academic integrity. This is available at:

http://mcmaster.ca/academicintegrity/students/index.html

If the paper or a portion of it is to be submitted as course requirements for another course, prior approval of both professors is required. **Late papers will be penalized at a rate of 10% of the final mark received for each working day or part day that the paper is late.**

Key Dates

Paper Proposals due: **February 13th**.
STATA assignment due: **April 3rd**
Full papers due: **June 14th.**

Course Evaluation

At the end of the course, five minutes will be set aside for students to complete written evaluation forms.

E-Mail Policy

Effective September 1, 2010, it is the policy of the Faculty of Social Sciences that all e-mail communication sent from students to instructors (including TAs), and from students to staff, must originate from the student's own McMaster University e-mail account.

This policy protects confidentiality and confirms the identity of the student. It is the student's responsibility to ensure that communication is sent to the university from a McMaster account. If an instructor becomes aware that a communication has come from an alternate address, the instructor may not reply at his or her discretion.