Course Schedule: Wednesday 11:30-14:30
Course Location: FSS 9003
Office: Social Science Building, 9054
Office Hours: Wednesday 2:45-4:15pm
Phone: 613-562-5800 ext. 8910
E-mail: abrodeur@uottawa.ca

Official Course Description:
Analysis of the concepts and tools used in micro-econometrics with particular focus on empirical applicability. Topics may include discrete choice models, limited dependent variables, panel data, duration models, and program evaluation, together with relevant economic applications.

This course will cover the major econometric techniques used by applied economists. At the end of the course, you should have a good idea of research questions and the most relevant methods to answer research questions. This should help you to formulate research questions in your field, as well as equip you to tackle these questions with contemporary methods.

Evaluation:
Midterm exam (February 28th, 2018) 25%
Data Exercise 5%
Research project
  Individual written component 30%
  Presentation 10%
Final Exam 30%
Absence from an examination or late submission of an assignment:

The research project, presentation and exams are not optional. Should you miss the presentation or exams due to illness, you will have 5 business days to provide me with an official medical certificate. Only medical certificates from the College of Physicians and Surgeons of Ontario and the College of Psychologists of Ontario, or their Québec equivalents, are considered to be valid medical certificates. Certificates from naturopaths, homeopaths, doctors of traditional Chinese medicine, etc., will not be accepted.

Absence from any examination or test, or late submission of assignments due to illness, must be justified; otherwise, a penalty will be imposed. The Faculty reserves the right to accept or reject the reason offered. Reasons such as travel, employment, and misreading the examination schedule are not usually accepted.

Deferred exams for winter economics courses will be scheduled Friday, May 4th 2018. Requests for a deferred final exam must be submitted to the Department of Economics office (in the case of undergraduate courses) or through uoZone (in the case of graduate courses) within 5 business days of the date of the exam.

Prerequisite: ECO5185 (or equivalent).

Textbook:
There is no required textbook for this course. Many of the readings listed below are articles for which the University of Ottawa has an online subscription. Others will be made available on reserve.

A very good graduate text which cover many of the concepts we will discuss (and is thus a good resource to consult) is:


While there exist several econometric software packages that are well-adapted to the estimation of models for microdata, not all of them are readily available on campus. For this course you will be required to learn and use Stata. If you wish to order your own copy of Stata, you must do so through the company. Stata is also available in the campus computer labs for social science students, so it is not necessary to purchase your own copy.

See Knittel and Metaxoglou (2016) for a set of best practices on how to organize, process and analyze data.
Course outline:

1. **Introduction (January 10)**


2. **Program Evaluation and Limitation of OLS (January 17 and 24)**


3. **Randomized Control Trial (January 31)**


4. **Instrumental Variables (February 7)**


5. **Regression Discontinuity Design (February 14)**


Midterm exam: February 28th

6. Difference-in-Differences (March 7)


7. Matching and Synthetic Control Methods (March 14)


8. Research Transparency (March 21)


9. Presentations (March 28)

10. Presentations (April 4)

**REGULATION ON ACADEMIC FRAUD**

Academic fraud is an act committed by a student to distort the marking of assignments, tests, examinations, and other forms of academic evaluation. Academic fraud is neither accepted nor tolerated by the University. Anyone found guilty of academic fraud is liable to severe academic sanctions.

Here are a few examples of academic fraud:
- engaging in any form of plagiarism or cheating;
- presenting falsified research data;
- handing in an assignment that was not authored, in whole or in part, by the student;
- submitting the same assignment in more than one course, without the written consent of the professors concerned.

In recent years, the development of the Internet has made it much easier to identify academic plagiarism. The tools available to your professors allow them to trace the exact origin of a text on the Web, using just a few words.

In cases where students are unsure whether they are at fault, it is their responsibility to consult the “Writing and Style Guide for University Papers and Assignments.” It can be found at: http://socialsciences.uottawa.ca/undergraduate/writing-style-guide

Persons who have committed or attempted to commit (or have been accomplices to) academic fraud will be penalized. Here are some examples of the academic sanctions, which can be imposed:
- a grade of “F” for the assignment or course in question;
- an additional program requirement of between 3 and 30 credits;
- suspension or expulsion from the Faculty.

For more information, refer to the Student’s Guide to Academic Integrity:

and Academic Integrity Website (Office of the Vice-President Academic and Provost)
http://web5.uottawa.ca/mcs-smc/academicintegrity/home.php
MICRO-ECONOMETRICS
ECO 6175
DATA EXERCISE

Objectives:
- Write a short paper
- Using a statistical software

Tasks:
- Write a short research paper
- Run a wage regression

Data Exercise:
The purpose of this data exercise is to help you discover the statistical software Stata. You need to submit your preferred estimate (and do-file that generates it) for an earnings function that has as regressors: Education, experience, gender, and province. We are interested in the coefficients on gender and education.

This exercise will use one quarter from the Labour Force Survey (to be provided). You also need to provide a short paper in which you describe your results. The short paper should be no more than 1 page of text including the table. Ideally you would want to describe your results in one or two sentences.

The data exercise is due on February 5th.

The mark breakdown for the data exercise will be as follows:
Text (Clarity/Organization/Style) /0
Results and do-file /5

You should do this without consulting other class members! Plagiarism is a serious offence and will not be tolerated!!!!!
MICRO-ECONOMETRICS
ECO 6175
RESEARCH PROJECT

Objectives:
- Research a specific (policy) issue
- Develop an argument
- Write a research paper
- Improve presentation skills
- Use a statistical software

Tasks:
- Write a research paper
- Present a research paper

The mark breakdown for the research project will be as follows:
Research paper
- Content /25
- Organization/Style/Clarity /5

Presentation
- Content /7
- Organization/Style/Clarity /3

If your research paper is late, 10 percentage points will be subtracted from your mark for the paper per day (or part thereof) that it is late, unless you provide me with an official medical certificate.

Plagiarism is a serious offence and will not be tolerated!!!!!!

I strongly recommend that you discuss your topic with me as early as possible during the term so as to ensure that you do not select an unacceptable or infeasible topic. I need to approve your topic! The deadline for approval is January 31st, 2018. Note that you need to rely on an identification strategy covered in class.

You need to write an empirical paper. Empirical papers use data collected by observation, or by experiment, to answer a research question.

Note that the Public Use versions of many Statistics Canada microdata sets can now be retrieved directly through a service called odesi, which is accessible through the university library website. Census data are
available both through the Canadian Census Analyzer (also accessible through the library website) and through odesi.

**Research Paper:**
The research paper and your do-file are due on April 17th. Send me your research paper and your do-file by email.

**Page limit and structure:**
The research paper should be no more than 22 pages and no less than 20 pages (double spaced, 12 point font).

Title page and abstract: 1 page
Introduction: 3 pages approximately
Conceptual framework: 1-2 pages approximately
Data and descriptive statistics: 2 pages approximately
Identification strategy: 1-2 pages approximately
Results: 3 pages approximately
Conclusion: 1 page
Reference: 2 pages approximately
Figures and tables: 6 pages approximately

Provide complete references, i.e. author, title, journal, etc. Follow the style guide for the *Quarterly Journal of Economics*.

**Presentation:**
I will provide detailed information about how to present your research paper during the first class.

**Duration: (20 minutes)**

**Structure:**
**Introduction: 3 minutes approximately**
(2 slides: You should introduce your topic and tell us why we care about your research question. Tell us in the introduction what is your main result.)
**Literature review: less than 1 minute**
**Conceptual framework: 2 minutes approximately**
(1-2 slides: Describe the mechanisms or theory.)
**Dataset and descriptive statistics: 2 minutes approximately**
(2 slides: 1 slide describing your main dataset and your sample and 1 slide showing a table with descriptive statistics.)
**Identification strategy: 2 minutes approximately**
(1 slide with your main specification/equation)
**Results: 4 minutes approximately**
(3 slides: show 2 tables or figures)

**Conclusion: 1 minute approximately**

**We will ask questions for approximately 5 minutes!**

If you miss your presentation due to illness, it must be justified:

You would have to submit a second research paper on a different topic (same length and instructions). This second article would be due on April 24th. The mark breakdown for the second research article would be as follows:

- **Content**: /8
- **Organization/Style/Clarity**: /2