Carleton University

**ECON 5027 - Econometrics I**

Professor: Matthew Webb

Winter 2018

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**General Information**

**Instructor:** Matt Webb, Loeb Building, B-851  
**Phone:** (613)520 – 2600 x 3752  
**Email:** matt.webb@carleton.ca  
**TA:** TBA  
**Lectures:** Mondays 11:35 am - 2:35 pm - SA 315  
**Tutorials:** Thursdays 6:05 pm - 7:25 pm, SA 317  
**Office hours:** Tuesdays : 11:30 am - 1:30 pm  
**Course Webpage:** cuLearn

**Course objectives**

This course covers econometric methods associated mainly with regression analysis. Introductory concepts related to simple and multiple regressions are assumed known. In particular, students should be familiar with the statistical properties of Ordinary Least Squares (OLS); however, it is not assumed that these properties are known in a matrix algebra context. The course will nevertheless review this material in addition to several principles of matrix algebra. The course will introduce – with the use of matrix algebra – fundamentals of econometric theory underlying Ordinary Least Squares (OLS), Generalized Least Squares (GLS), Instrumental Variables (IV) and hypothesis testing. See the proposed outline for a complete list of topics.

The course exposition is formal and technical, yet the main focus is on applicability. The course includes two assignments using well known data sets and econometric problems of recent interest in economics.

**Tutorials:**

Tutorials will be given by the Teaching Assistants, starting January 18th. These tutorials will involve working through additional problem sets based on the course material, or taking up assignments or midterms. The tutorials will also provide an additional opportunity for students to ask questions they may have.

**Programming Languages:**

Students are free to use whichever programming language they wish for the assignments. That said, class examples will be given using Stata. Support will be available for Stata, specific support for other programming languages may be limited. Stata is available for free for Carleton University students.
Evaluation:

- Assignment I: 15%
- Midterm Exam: 30% - March 5th, covers material through to February 26th
- Assignment II: 15%
- Final Exam: 40% - covers all course material

Assignments:

Late assignments will not be accepted.
Students may work in groups of two or three individuals. Only one assignment per group needs to be submitted – list all groups members on your assignments. Assignments will have a mix of theoretical and applied questions.

Midterm Exams:

There will not be a make up exam for those who miss a midterm. Those missing the midterm for a valid reason will have the weight of the midterm shifted to the final, resulting in a final worth 65%. Medical notes are required for those missing a midterm. The authenticity of notes provided may be subject to verification. Submitting a forged note will be regarded as academic misconduct. Those missing the midterm without a valid reason will receive a mark of zero.

Important Dates:

The evaluation dates listed below are subject to change, but are unlikely to do so:

- Assignment I
  - Available online February 1st
  - Due February 15th, in tutorial, or before
- Reading Week: February 19th-23rd
- Midterm: March 5th, in class
- Assignment II
  - Available online March 22nd
  - Due April 5th, in tutorial, or before
- Final Exam:
  - TBD, during final exam period
  - Students are not to make travel plans during the exam period: April 14th - 26th
**Textbooks**

**Primary Textbook**


**Reference Manuals**


**Tentative Course Outline**

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Additional Information

Course Standing

Standing in a course is determined by the course instructor subject to the approval of the Department Chair and the Faculty Dean. This means that course grades may be scaled upwards or downwards in a rank preserving manner to better fit the relevant departmental distributional norm. No grades are final until they have been approved by the Dean.

Academic Misconduct - Plagiarism

Please be aware that plagiarism is serious offence at Carleton and should be recognized and avoided. For information on how to do so, please see "Pammett on Plagiarism and Paraphrasing” at [carleton.ca/economics/courses/writingpreliminaries](http://carleton.ca/economics/courses/writingpreliminaries).

Copyright of Course Materials

Student or professor materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

Accessibility and Accommodation

For Students with Disabilities:

Students with disabilities requiring academic accommodations are encouraged to contact a coordinator at the Paul Menton Centre for Students with Disabilities (ext. 6608) to complete the necessary letters of accommodation. After registering with the Centre, please set up an appointment with me to discuss your needs at least two weeks prior to a test or in-class mid-term exam. This is necessary in order to ensure sufficient time to make the necessary arrangements.

For Religious Observance:

Students requesting academic accommodation on the basis of religious observance should make a formal, written request to their instructors for alternate dates and/or means of satisfying academic requirements. Such requests should be made during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist, but no later than two weeks before the compulsory academic event. Accommodation is to be worked out directly and on an individual basis between the student and the instructor(s) involved. Instructors will make accommodations in a way that avoids academic disadvantage to the student.

Students who have questions or want to confirm accommodation eligibility of a religious event or practice may refer to the Equity Services website for a list of holy days and Carletons Academic Accommodation policies, or may contact an Equity Services Advisor in the Equity Services Department for assistance.

For Pregnancy:

Pregnant students requiring academic accommodations are encouraged to contact an Equity Advisor in Equity Services to complete a letter of accommodation. The student must then make an appointment to discuss her needs with the instructor at least two weeks prior to the first academic event in which it is anticipated the accommodation will be required.