



**PLEASE NOTE THAT CHANGES COULD BE MADE TO THIS COURSE
OUTLINE
UP TO JANUARY 16, 2026**

ECON 3900 B – Research Methods in Economics

Winter 2026

Instructor: Professor M. Demers
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Lecture and meeting time: Monday 11:35pm-2:25pm

Course location and delivery mode: SA 516 In person

Brightspace Course Page: <https://brightspace.carleton.ca/d2l/home/365099>

Prerequisites: ECON 2030 with a grade of C+ or higher, ECON 2103 with a grade of C+ or higher, ECON 2210 (or equivalent) with a grade of C- or higher, and ECON 2220 (or equivalent) with a grade of C+ or higher. A grade of C+ or higher is required to qualify for ECON 4905.

Students who believe they have taken a similar background course or courses from another university must provide appropriate documentation to the Department of Economics Undergraduate Administrator, Sean Hall.

DEF(erred final grade) status at the end of this course precludes (continued) registration in any other course for which the former is a prerequisite.

Course Description:

The objective of this course is to learn how to conduct a research project in economics and write a well-structured and well-argued technical paper describing this research. This process includes the following steps:

- a) choosing a topic;
- b) critically evaluating the relevant economics literature on this topic;
- c) developing a research proposal;
- d) finding relevant data sources and collecting economic data;
- e) formulating your models, your hypotheses and testing them with appropriate econometric techniques: panel regressions and cross-section regressions;
- f) clearly and meaningfully summarizing, tabulating and explaining the findings;
- g) comparing your empirical results with those from the studies that you have reviewed.

Suggested Textbooks:

Dougherty, Christopher (2016). ***Introduction to Econometrics*** 5th edition. Oxford: Oxford University Press. ISBN-13: 9780199676828. \$114.99. eText ISBN:9780192655783. \$72.99 for 180 days. From:
<https://www.vitalsource.com/en-ca/products/introduction-to-econometrics-christopher-dougherty-v9780192655783?srslid=AfmBOopqZTWstkMKQKEnuMaVIA20gDmhrcwi0UDLAGt685Wisgbf0o7>

Gujarati, D. (2015) ***Econometrics by Example***, 2nd edition, New York: Palgrave (Macmillan). ISBN-13. 978-0230290396

Bailey, Michael A. (2020) ***Real Econometrics***, 2nd edition, Oxford: Oxford University Press. ISBN-13: 978-0190857462 Available from Amazon.ca New: \$179.99. Used \$90.97.

Gujarati, D. and D. C. Porter. (2009) ***Basic Econometrics***, 5th edition, Toronto: McGraw-Hill.
https://ucanapplym.s3.ap-south-1.amazonaws.com/RGU/notifications/E_learning/Online_study/Basic-Econometrics-5th-Ed-Gujarati-and-P.pdf

Brightspace and e-mail:

This course will make intensive use of Brightspace. Guidelines, assignments, and other information will be posted on Brightspace. It is each student's responsibility to check this website for posted material. I will also send the class announcements using Brightspace. In addition, please check your e-mail frequently. If you do not have a Brightspace account, please visit:
<https://carleton.ca/brightspace/>

First lecture:

There will be a preliminary lecture to explain the research paper in detail. During the first lecture (week #1), you are also expected to choose a topic and form a team (of 3-4 students). During week # 1, you will also start your literature reviews. During the following weeks, you will work on your project and meet with me for consultation (during class-time and possibly other times as there are many teams in the class). Details to be announced during the first lecture and on Brightspace.

Team composition:

Each of you will be part of a team or a group of 3-4 persons who will be working on different aspects of a problem. Each person will have a different model with a different dependent variable and will be responsible for it.

There will be regular meetings with the instructor and the TA.

Research Paper

As mentioned above, the objective of this course is to initiate students to the process of developing and writing a research project. The teams will be guided towards the achievement of this goal with the help of regular meetings with me and the TA.

The recommended length is 15-20 pages of text, excluding the cover page, footnotes, tables and references. Papers must be typed double-spaced (Times-Roman 12 pts) and have appropriate margins (1 inch on all sides.)

The research paper must be analytical and thorough. The study must clearly identify the problem to be investigated. The paper must have:

1. A concise abstract (150 words) explaining the problem explored and the main conclusions.
2. A well-written introduction (approximately 1/2 a page) to explain why your topic is important and outlining what you will accomplish.
3. Section 1: A literature review: synthesize and critically evaluate some economic theories and empirical studies on your topic that you will use. (2 pages)
4. Section 2: An explanation of the economic theory underlying your model, the hypotheses that will be made and the analytical/empirical/econometric methodology that will be used.
5. Section 3: A detailed explanation of the data sources and an analysis of your data. (summary statistics and correlation table).
6. Section 4: A clear and well-organized discussion of your results in words as well as tables to present your results.
7. Section 5: A comparison of your empirical results with the results obtained in other similar studies in the literature and an explanation for similar or different results.
8. A conclusion summarizing and evaluating your results and suggesting possible improvements.
9. Appendix 1 that will contain the list of countries and your data sources.
10. Appendix 2 that will include all the tables even if they have been given in Section 4.
11. **Your Stata do files and log files must be uploaded on Brightspace.**
12. The paper must be neat, well organized, written in correct English with no grammatical or spelling errors and no typos. The format of the paper and of the bibliography (references) section must be done according to the provided instructions. Sloppy work will be rejected.

Topic: You will select your topic from a list that I will provide on the first day of class.

Timetable for the research paper:

The task of writing the research project will be undertaken in steps with specific deadlines, as outlined below:

Item	Deadline		% of grade
Team composition and the choice of a topic to be approved by the instructor	week #1, January 5		
Individual proposal	week # 4, January 27 at 11:55 PM	Submit on Brightspace in the drop box	20
Approval of variables for Stata assignment	week # 4, January 27 at 11:55 PM	Submit on Brightspace in the drop box	
Stata assignment	week #6, February 9 at 11:55 PM	Submit on Brightspace in the drop box	20
Presentation	March 30, Week # 12 and April 6, Week #13	In class presentation	5
Submission of research paper	Week # 13 the last day of the Winter semester April 8 at 11:55 PM.	Submit on Brightspace in the drop box	55

Each step of the timetable and its components (including instructions for the Bibliography) will be explained in greater detail during the first lecture and relevant guidelines will be posted on Brightspace.

Summary Course Evaluation:

Proposal	20%
Stata assignment	20%
In class presentation	5%
Final paper	55%

The deadlines may be changed depending on class progress. Students will be advised accordingly during weekly meetings or via Brightspace.

Each student will be evaluated individually. Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by an instructor may be subject to revision. No course grades are final until approved by the Faculty Dean.

If you cannot meet a deadline, you need to inform me by email. Late (up to 1 week) submissions will suffer a 10% deduction unless justified by illness or a personal or family emergency. If your proposal is rejected, 25% will be deducted and you will have 1 week to resubmit an acceptable version.

Tutorials:

There will be tutorials given by the TA on the use of Stata for your projects. **Attendance is compulsory.** They will take place during classtime at a time to be announced. The tutorial will review some fundamental commands of Stata including merging data, defining variables, missing variables, dropping variables that you will use in your projects. The exact dates will be announced on Brightspace.

Stata Assignment

There will be an **individual** assignment using Stata. The assignment will consist of importing your excel files for your variables into Stata, merging them and cleaning the data. Finding out how to define variables and transform them. Finding out how to identify missing data. Calculating summary statistics. Conducting pooled OLS regressions as well as panel regressions. **The variables must be related to your topic and must be approved before you can proceed with the assignment.** Details will be provided on Brightspace. Late assignments (unless justified by illness or a personal or family emergency) will suffer a 10% penalty. Assignments that are more than 1 week late will be given a grade of 0.

ChatGPT and Artificial Intelligence algorithms

Generative Artificial Intelligence tools such as ChatGPT may be used to do part of your research. However, you must declare that you have used them and state explicitly how. You may not use them to write your paper

Re-marking:

Any request for the remarking of assignments or papers must be submitted in writing within two weeks of that assignment or paper first being returned to the class. The request should contain a detailed explanation of why you feel you should receive a higher mark. Please note that remarking will apply to the entire assignment or paper, and not just to the contentious question. As a result, the revised mark may be higher than, lower than or the same as the original mark.

Course Requirements:

Students must fulfill all course requirements to achieve a passing grade (D- or higher). **These include providing a complete log file that presents all the steps of your work. Furthermore,** these include attending weekly meetings on a regular basis.

Intellectual Property Rights Regarding Course Material:

Please note: "Classroom teaching and learning activities, including lectures, discussions, presentations, etc., by both instructors and students, are copy protected and remain the intellectual property of their respective author(s). All course materials, including PowerPoint presentations, outlines, and other materials, are also protected by copyright and remain the intellectual property of their respective author(s). Students registered in the course may take notes and make copies of course materials for their own educational use only. Students are not permitted to reproduce or distribute lecture notes and course materials publicly for commercial or non-commercial purposes without express written consent from the copyright holder(s)." (See <https://carleton.ca/provost/2015/calendar-dates-and-course-materials-sharing-website/>)

PLAGIARISM, RESOURCES AND MENTAL HEALTH, ACADEMIC ACCOMODATIONS

Plagiarism

The University [Academic Integrity Policy](#) defines plagiarism as “*presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one’s own.*” This includes reproducing or paraphrasing portions of someone else’s published or unpublished material, regardless of the source, and presenting these as one’s own without proper citation or reference to the original source. Examples of sources from which the ideas, expressions of ideas or works of others may be drawn from include but are not limited to: books, articles, papers, literary compositions and phrases, performance compositions, chemical compounds, artworks, laboratory reports, research results, calculations and the results of calculations, diagrams, constructions, computer reports, computer code/software, material on the internet and/or conversations.

Examples of plagiarism include, but are not limited to:

- any submission prepared in whole or in part, by someone else, including the unauthorized use of generative AI tools (e.g., ChatGPT);
- using ideas or direct, verbatim quotations, paraphrased material, algorithms, formulae, scientific or mathematical concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another’s data or research findings without appropriate acknowledgement;
- submitting a computer program developed in whole or in part by someone else, with or without modifications, as one’s own; and
- failing to acknowledge sources through the use of proper citations when using another’s work and/or failing to use quotations marks.

Plagiarism is a serious offence that cannot be resolved directly by the course’s instructor. The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of “F” for the course.

For the full policy please refer to the [Academic Integrity Policy](#).

Resources and Mental Health

Statement on Student Mental Health: As a University student you may experience a range of mental health challenges that significantly impact your academic success and overall well-being. If you need help, please speak to someone. There are numerous resources available both on- and off-campus to support you. Here is a list that may be helpful:

Emergency Resources (on and off campus): <https://carleton.ca/health/emergencies-and-crisis/emergency-numbers/>

Carleton Resources:

- Mental Health and Wellbeing: <https://carleton.ca/wellness/>
- Health & Counselling Services: <https://carleton.ca/health/>
- Paul Menton Centre: <https://carleton.ca/pmc/>
- Academic Advising Centre (AAC): <https://carleton.ca/academicadvising/>
- Centre for Student Academic Support (CSAS): <https://carleton.ca/csas/>
- Equity & Inclusivity Communities: <https://carleton.ca/equity/>

Off Campus Resources:

- Distress Centre of Ottawa and Region: (613) 238-3311 or TEXT: 343-306-5550, <https://www.dcottawa.on.ca/>
- Mental Health Crisis Service: (613) 722-6914, 1-866-996-0991, <http://www.crisisline.ca/>
- Empower Me: 1-844-741-6389, <https://students.carleton.ca/services/empower-me-counselling-services/>
- Good2Talk: 1-866-925-5454, <https://good2talk.ca/>
- The Walk-In Counselling Clinic: <https://walkincounselling.com>

Academic Accommodation

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

Pregnancy obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For accommodation regarding a formally-scheduled final exam, you must complete the Pregnancy Accommodation Form ([click here](#)).

Religious obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details [click here](#).

Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable).

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: <https://carleton.ca/equity/sexual-assault-support-services>

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation will be provided to students who compete or perform at the national or international level. Write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

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Short URL: <https://carleton.ca/economics/?p=44679>