

**DEPARTMENT OF ECONOMICS
CARLETON UNIVERSITY**

ECON 2220 A – INTRODUCTORY ECONOMETRICS

2020 WINTER

CLASS SCHEDULE	Lectures: Mondays (6:05 to 8:55 p.m.) Southam Hall 304 Tutorials: Mondays (4:05 to 5:25 p.m.) Southam Hall 304
INSTRUCTOR	Tanvir Quadir E-mail: tanvir.quadir@carleton.ca cuLearn at www.carleton.ca/cuLearn
OFFICE HOURS	Wednesdays (5:30 to 6:30 p.m.) in B-842-A Loeb (Availability: during office hours or via e-mail)
TEACHING ASSISTANTS	(i) Ahmed Mustafa Labib ahmedmustafalabib@gmail.com (ii) Tobi Fakorede olubunmifakorede@gmail.com

COURSE DESCRIPTION:

Introductory Econometrics is a continuation of ECON 2210 with focus on regression methods to study the relationship between two or more economic variables. Topics covered include ordinary least squares (OLS), hypothesis testing in linear regression models, choosing functional forms for regression, multicollinearity, serial correlation, heteroskedasticity, and practical implementation of regression models.

Prerequisites: ECON 2210 (or equivalent) with a grade of C- or higher, and ECON 1402 (or equivalent) with a grade of C- or higher. 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, Renee Lortie.

A grade of C+ or higher is required to qualify for ECON 3900, 3920, 4002, and 4706. 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.

The course consists of lectures 3 hours a week, and tutorials 1.5 hours a week. *Tutorials will start from the second class and students should attend weekly tutorials.* During the tutorials the T.A. will briefly summarize the main points explained in the lectures, provide further examples or go through problem sets in the course textbook, and implement regression methods using STATA. The detailed schedule of the tutorial classes and the topics to be covered in each tutorial will be available at cuLearn.

DATA ANALYSIS AND STATA: Students are required to use STATA for their assignments. Data used for assignment/examples are provided at cuLearn.

EVALUATION DATES:

Midterm Examination (One)	<u>Midterm</u> : Mar. 02, 2020, 6 p.m.- 8 p.m.	25%
Assignments (Two)	<u>Assignment 1</u> : Due on Feb. 24, 2020 <u>Assignment 2</u> : Due on Apr. 06, 2020	16%× 2 = 32%
Final Examination	Between April 13 - 25, 2020 (TBA by the Registrar’s Office)	40%
Attendance	At least 90% of the classes should be attended to earn the full reward 3%	3%

TEXTBOOK:

Using Econometrics: A Practical Guide by A. H. Studenmund, 7th edition 2017, Pearson.

TENTATIVE COURSE SCHEDULE (MAY BE ADJUSTED AS COURSE UNFOLDS):

<i>Week</i>	<i>Date</i>	<i>Description</i>	<i>Week</i>	<i>Date</i>	<i>Description</i>
1	Jan. 6	Chapter 1: An Overview of Regression Analysis	9	Mar. 02	Midterm Exam (Chapters 1 - 6)
2	Jan. 13	Chapter 2: Ordinary Least Squares (Tutorial starts from this class)	10	Mar. 09	Chapter 7: Specification – Choosing a Functional Form
3	Jan. 20	Chapter 3: Learn to Use Regression Analysis	11	Mar. 16	Chapter 8: Multicollinearity
4	Jan. 27	Chapter 4: The Classical Model (Assignment 1 available at cuLearn)	12	Mar. 23	Chapter 9: Serial Correlation (Assignment 2 available at cuLearn)
5	Feb. 03	Chapter 5: Hypothesis Testing	13	Mar. 30	Chapter 10: Heteroskedasticity
6	Feb. 10	Chapter 6: Specification – Choosing the Independent Variables	14	Apr. 06	Review of Chapters 7 – 10 (Assignment 2 due)
8	Feb. 24	Review of Chapters 1 – 6 (Assignment 1 due)		Apr. 13–25	Final Exam (TBA by Registrar Office)

EVALUATION CRITERIA:

Each student's grade in the course will be calculated as a weighted average of scores for two take-home assignments (32%), a midterm examination (25%), a final examination (40%), and attendance (3%). Students must fulfil *all* of the course requirements as set out for mid-terms, assignment and final exam to achieve a passing grade (D- or higher). Important guidelines pertaining to the evaluation instruments are the following:

ONE MIDTERM EXAMINATION (25%): Midterm examination will be held in class and will last 2 hours. It's is closed-book exam. There is no deferred midterm. If you miss a midterm exam and provide a valid medical certificate or a verifiable compassionate reason within one week of the missed exam, the assigned weight (of 25%) will be added to your final exam; otherwise a mark of zero is assigned. Please note that doctor's note or police report, the documentation provided by students for missed midterm may be subject to verification. Students will need to fill out the form "Consent to Release Information to a Third Party" (which is available at cuLearn) when they submit a medical note. However, please note the following:

A maximum weight of 65% will be given to the final exam in the event of missed Midterm or Assignment.

TWO ASSIGNMENTS (32%) – DUE IN CLASS ON FEB. 24 AND APR. 06, 2020: To submit the assignments other than in-person at the start of class, please discuss and obtain written permission from the instructor, otherwise the assignment will be considered late, and late assignments will receive a grade of zero. Please keep a photocopy of your assignment as it may not be returned prior to the final examination. Students may wish to work together on assignments, but each student must write up his/her assignment independently.

The assignments require you to use STATA to run regression projects. Please keep a copy of your assignment, as your graded assignment may not be available for pick-up prior to the final examination. I do encourage you all to use STATA as it is one of the most popular software packages for statistical analysis, which is currently being used in many governmental institutions and the private sector.

You can download Stata/SE 15.0 and 16.0 for Windows from the link below. Note that the university has a volume license for Stata, so you can download it to your computer for personal use as long as you study at Carleton.

<https://carleton.ca/its/all-services/computers/site-licensed-software/stata/>

To do regression analysis in STATA, please carefully follow the instructions in the video below. You will need Windows Media Player 2009 to play this MP4 media file.

https://www.dropbox.com/s/5tsddt8cd5g7hw9/Stata_Regression_Lecture_01.mp4?dl=0

FINAL EXAMINATION (40%): The 3-hour final examination will take place during the official final examination period of April 13 to 25, 2020, and is scheduled by the Registrar's Office. Please do not make travel plans prior to April 25, 2020. Failure to write the final examination when the student has achieved satisfactory performance during the term will result in a grade of DEF ('Deferred Final Examination'). Application to write a deferred final examination must be made at the Registrar's Office. See Academic Regulation 2.3 for the official meanings of these grades. If you miss the final examination, please contact the Registrar's Office as soon as possible after the missed exam in order to qualify to write a deferred exam next semester. Winter term deferred final examinations will be held between May 15 and 27, 2020.

ATTENDANCE (3%): Regular attendance is a key to the success of this course. Students must sign the attendance sheet of the lecture classes if they wish to be graded. Attendance will be taken at the end of the lecture classes

ADDITIONAL INFORMATION:

COURSE STANDING: Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

ACADEMIC INTEGRITY: Students should familiarize themselves with the Carleton University policy on Academic Integrity. This policy details those behaviours considered to be violations of academic integrity (e.g. cheating, plagiarism) and provides guidelines as to the imposition of various sanctions, including a reduction in grade, suspension, and expulsion. Also be aware of the document titled "Pammett on Plagiarism and Paraphrasing," which can be found on the page at www.carleton.ca/economics/courses/writing-preliminaries.

IMPORTANT DEADLINES: January 17, 2020 is the last day to register for the course; January 31, 2020 is the last day to withdraw with a full fee adjustment; and April 07, 2020 is the last day to withdraw without academic penalty.

STUDENTS REQUIRING SPECIAL 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 more details, visit the Equity Services website: <https://carleton.ca/equity/wp-content/uploads/Student-Guide-to-AcademicAccommodation.pdf>

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, visit the Equity Services website: <https://carleton.ca/equity/wp-content/uploads/Student-Guide-to-AcademicAccommodation.pdf>

ACADEMIC ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term. You must also contact the PMC 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. <https://carleton.ca/pmc>

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/sexual-violence-support/>

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 must 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-StudentActivities-1.pdf>

ADDITIONAL STUDENT SUPPORT INFORMATION:

Carleton University offers additional support at the Writing Tutorial Service (215PA), Student Life Services (501 Unicentre), and the Student Academic Success Centre (302 Tory).