

ECONOMETRICS II
ECONOMICS EC2123A-650
Department of Economics
Western University

Summer 2023

General Information:

Instructor: Emmanuel Murray Leclair
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Office hours: Office hours will be held online using Zoom. Hours and days will typically be Tuesdays 12:00pm-1:00pm and Thursdays 12:00pm-1:00pm. However, it might vary from week to week. Link will be posted on OWL website.

Delivery mode: Online, asynchronous
Lecture materials uploaded Monday of each week, starting May 9th.

Course website: <https://owl.uwo.ca/portal>

Undergraduate inquiries: 519-661-3507 or SSC Room 4075 or econugrd@uwo.ca

Registration:

You are responsible for ensuring you are registered in the correct courses. If you are not registered in this course, the Department will not release any of your marks until your registration is corrected. You may check your timetable by using the Login on the Student Services website at <https://student.uwo.ca>. If you notice a problem, please contact your home Faculty Academic Counsellor immediately.

Prerequisite/Antirequisite Note:

Economics 2122A/B or Statistical Sciences 2035 with a minimum mark of 70%; and 0.5 course from: Mathematics 1225A/B, Mathematics 1230A/B, Calculus 1000A/B; and 0.5 course from Mathematics 1229A/B, Mathematics 1600A/B, Calculus 1301A/B, or Calculus 1501A/B.

Antirequisite(s): Economics 2223A/B

You are responsible for ensuring that you have successfully completed all course prerequisites, and that you have not taken any anti-requisite courses. Lack of prerequisites may not be used as a basis for appeal. If you are found to be ineligible for a course, you may be removed from it at any time and you will receive no adjustment to your fees. This decision cannot be appealed.

If you find that you do not have the course prerequisites, it is in your best interest to drop the course well before the end of the add/drop period. Your prompt attention to this matter will not only help protect your academic record, but will ensure that spaces become available for students who require the course in question for graduation.

Course Description:

This course introduces the linear regression model as a tool to estimate economic relationships with observational data, test hypotheses about economic theory and learn about the effect of policies. Emphasis will be put on the intuition underlying the linear model, interpretation of the ordinary least squares estimator as well as assumptions required to conduct inference. We will then introduce endogeneity and instrumental variables to study the distinction between correlation and causality, with a focus on practical application and intuition. Time permitting, we will cover time series and panel data.

Course Objectives:

By the end of the course, students should be familiar with simple linear regression, multivariate regression, testing hypotheses and conducting inference on these models, testing for violation in model assumptions and how to address them. Lastly, students should also be familiar with the distinction between correlation and causation.

The empirical assignments will give the students the opportunity to apply their knowledge to actual economic examples. For instance, students will learn to apply the methods and analysis on real data using Excel.

Course Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Understand the fundamental concepts of econometrics and interpret regression results.
- Analyze the properties of the linear regression model.
- Perform valid statistical inference
- Know when results can be interpreted as causal
- Apply fundamental econometric tools in Excel

Textbook(s) and Course Materials:

Wooldridge, Jeffrey, *Introductory Econometrics: A Modern Approach*, 7th edition, South-Western.

Useful resource(s):

<https://www.masteringmetrics.com/online-metrics-resources/>

Assessments and Grading:

The course is designed as a twelve-week block with weekly quizzes and two empirical assignments. All assessment will be based on the lecture slides and videos, and tutorial videos. The breakdown of the grades are as follows:

Assessment	Tentative Date*	Grade	Material Coverage (up to)
Excel Assignment 1	May 11 th	4%	
Excel Assignment 2	May 18 th	4%	
Excel Assignment 3	May 26 th	4%	
Quiz 1	June 2 nd	10%	Probability/Statistics and Introduction to Linear Regression
Quiz 2	June 9 th	10%	Properties of Simple Linear models
Quiz 3	June 16 th	10%	Multiple Linear regression model and inference
Assignment 1	June 22 nd	19%	Conducting empirical analysis of a linear regression using Excel
Quiz 4	July 7 th	10%	Causality, endogeneity, and Instrumental variables (IV)
Quiz 5	July 21 st	10%	Simple Time series and Panel Data models
Assignment 2	July 27 th	19%	Conducting empirical analysis of causal model using Excel

*Exact dates will be provided on OWL, either by Announcement or Calendar or both.

Quizzes:

- Quizzes will be administered on OWL.
- Quizzes will be timed. Upon starting, students will have 1 or 2 hours to complete the quiz. It is the student's responsibility to ensure a stable internet connection upon starting the quiz.
- Able to start quiz on a 24-hour basis (midnight to midnight, Eastern time) on the Friday of the corresponding week.
- Content on quizzes is cumulative but with more emphasis on new material
- Questions will be randomized from a question bank

Excel Assignments:

- Assignments will be due on Friday of the corresponding week before 11:55 pm (EST).
- Excel workbooks must be completed and uploaded to OWL.
- Instructional videos available on the OWL site: "Excel for Economics".

Assignments:

- Assignments will be due on Thursday of the corresponding week before 11:55 pm (EST).
- Video tutorials and/or written notes will go through all technical requirements to complete each assignment.
- Data will be provided.

Missed assignments and quizzes:

Assignments must be submitted on time. Late assignments will not be accepted, and no make-up assignments will be given.

If a single quiz is missed and the student's absence is officially excused (including SRA), I will add the weight of this quiz to all other quizzes. Students who miss two or more quizzes should contact the instructor for additional steps and to determine if the course learning outcomes have been sufficiently met to pass the course.

Students who miss any assessments must follow Western University's procedures for approval of their absence to receive an accommodation. See the 'Please Note' section of this course outline for details on these procedures. If Western University announces any procedures for the approval of absences during Summer 2023 that supplement or supplant the information provided on this syllabus, please follow those procedures.

Communication

Weekly lecture videos and slides will be uploaded on OWL. You are strongly encouraged to follow along the corresponding chapters in the textbook. You can expect a response to emails within 48h outside of weekends/holidays.

Technical Requirements

Zoom Meetings: The course content is delivered primarily using OWL. Office hours (and any unscheduled tutorials and synchronous lectures) will be delivered via Zoom. Students will be able to "Join" with a Zoom meeting using the tool on OWL.

Conduct in a Zoom meeting will adhere to guidelines outlined by Western University. Summary of which follows:

- Students must be able to identify themselves in a Zoom meeting. Identification can include, but not limited to; activating student's webcam for visual confirmation, private message in Zoom Chat to the professor (or TA), or verbal confirmation.
- Students must have a microphone and on mute when joining the Zoom meeting.
- Students will preferably have a webcam available.
- Damaged or malfunctioning technology or low bandwidth that could affect the student's use of Zoom should be brought to the professor's attention as soon as possible.

Failure to identify yourself in a Zoom Meeting will result in your removal from the meeting, and you will be unable to reconnect. Internet connection to access resources on owl and partake in zoom office hours.

For technical support, see the OWL help page or contact Western Technology Services Helpdesk (<https://wts.uwo.ca/about-wts/contact.html>). Google Chrome or Mozilla Firefox are the preferred browsers for OWL; update your browser frequently.

Professionalism, Privacy and Copyright:

- Students are expected to follow the Student Code of Conduct.
- All lectures and course materials, including slides, presentations, outlines, and similar materials, are protected by copyright. Students may take notes and make copies of course materials for their own educational purposes only.
- Students may not record lectures, reproduce (or allow others to reproduce), post or distribute lecture notes, assessments, or any other course materials publicly and/or for commercial purposes without written consent of the instructor.
- Recordings (audio or video) are not permitted without explicit, written permission of the instructor. Permitted recordings may not be distributed or shared.
- Students are expected to follow online etiquette expectations provided on OWL

Tips on How to Be Successful in this Class:

Students in this class should understand the level of autonomy and self-discipline required to be successful.

Please Note
Department & University Policies for Summer 2023

The University expects all students to take responsibility for their own Academic Programs. Students should also check their registration to ensure they are enrolled in the correct courses.

1. **Guidelines, policies, and your academic rights and responsibilities** are posted online in the current Western Academic Calendar at: <http://westerncalendar.uwo.ca>. Claiming that “you didn’t know what to do” is not an acceptable excuse for not following the stated policies and procedures.
2. Students must familiarize themselves with the “**Rules of Conduct for Examinations**” http://www.uwo.ca/univsec/pdf/academic_policies/exam/administration.pdf.
3. **Cheating as an academic offence:** Students are responsible for understanding what it means to “cheat.” The Department of Economics treats cheating incidents very seriously and will investigate any suspect behavior. Students found guilty will incur penalties that could include a failing grade or being barred from future registration in other Economics courses or programs. The University may impose further penalties such as suspension or expulsion.
4. **Plagiarism:** Students must write their essays and assignments in their own words. When taking an idea/passage from another author, it must be acknowledged with quotation marks where appropriate and referenced with footnotes or citations. Plagiarism is an academic offence (see Scholastic Discipline for Undergraduate Students in the Western Calendar at http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_20).

Western University uses software to check for plagiarism and students may be required to electronically submit their work. Those found guilty will be penalized as noted in point 3.

5. It is a Department of Economics policy that **NO** assignments be dated, stamped, or accepted by staff. Students must submit assignments to the instructor.
6. **Appeals:** University policies and procedures for appealing a mark can be found in the Student Academic Appeals section in the current Western Academic Calendar at: http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_14. **Please note the relevant deadlines.**

Department of Economics procedures for appealing a mark can be found here: https://economics.uwo.ca/undergraduate/program_counselling/responsibilities_policies.html#appeals. The Department will not consider an appeal unless an attempt has been made to settle the matter with the instructor first. Students who remain dissatisfied with the outcome may proceed to submit an appeal to econugrd@uwo.ca. Please follow the instructions and use the appeal form shown in the above link.

7. **Systematic adjustments of a class grade distribution** (either up or down) can occur in Economics courses. The fact that grades have been adjusted is **not** grounds for an appeal.

8. Note the following **add and drop deadlines**:

Last day to Add:

- Distance Studies – May 12
- Intersession – May 16
- Summer Evening A Term – May 12
- Summer Evening B Term – June 23

Last Day to Drop:

- Distance Studies – June 5
- Intersession – June 5
- Summer Evening A Term – June 5
- Summer Evening B Term – June 17

Policy Regarding Makeup Tests and Final Examinations

Faculty of Social Science policy states that oversleeping or misreading an exam schedule is NOT grounds for a makeup. This rule applies to midterm and final exams in the Department of Economics.

Policies Regarding Academic Accommodation

- Academic accommodation will not be granted automatically on request. Students must demonstrate by documentation that there are compelling medical or compassionate grounds before academic accommodation will be considered. The Faculty of Social Science's policies on academic accommodation are found at https://counselling.ssc.uwo.ca/procedures/academic_consideration.html
- **Accommodation for Students with Disabilities:** Students with disabilities or accessibility challenges should work with Accessible Education (formerly SSD, see http://academicsupport.uwo.ca/accessible_education/index.html), which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: [Academic Accommodation for Students with Disabilities](#).
- **Rewriting Exams and Retroactive Reweighting are NOT Permitted:** Students who proceed to write a test or examination must be prepared to accept the mark. Rewriting tests or examinations, or retroactive reweighting of marks, is **not** permitted. Students must also book travel arrangements AFTER final exam dates have been posted as they must not conflict with test or final exams.
- Unless medically incapable of doing so, students must notify their instructor prior to the test date or at least within **24 hours** when requesting a makeup exam. Failure to follow this

procedure may result in denial of academic accommodation and a grade of zero. Students should also set up an appointment as soon as possible to meet with their instructor. If the instructor is not available, send an email message to the instructor, copying the Undergraduate Coordinator at econugrd@uwo.ca. **Notifying instructors of a missed exam does not automatically entitle students to a makeup.**

- For medical illnesses, students may consult Student Health Services and request a Student Medical Certificate from the physician. If assessed by an off-campus doctor, students must obtain a certificate from his/her office at the time of the visit/assessment. Student Medical Certificate (SMC) is available here:
https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf
- **Documentation for Accommodation:** Individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds or for other reasons.
- **Western University policy on Consideration for Student Absence** is available here:
https://counselling.ssc.uwo.ca/procedures/probation_rtw/appeals.html
- **Religious Accommodation:** Students should consult the University's list of recognized religious holidays and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the [Western Multicultural Calendar](#).

Policy Regarding Class Attendance and Engagement:

If the instructor deems a student's attendance or engagement in the class to be unsatisfactory, that student may be prohibited from writing the final examination. Examples of unsatisfactory class engagement include frequent absences from an in-person or synchronous online class, lack of assignment submissions, and inadequate use of online course materials. Instructors who intend to make use of this policy will notify the student in advance.

Statement on Mental Health and Support Services:

Students under emotional/mental distress should visit http://uwo.ca/health/mental_wellbeing/ for more information and a complete list of resources on how to obtain help.

Statement on Remote Proctoring:

While Western intends to hold most classes, mid-terms and finals in-person, the London-Middlesex Health unity may require western to teach in a remote format. If this occurs, all assessments will be done remotely and may involve the use of remote proctoring software (i.e., Proctorio, ProctorTrack). Instructors will provide information on the details should the need arise.