University of Victoria | Economics

ECON 365 Econometrics Part 1 – A01 (11142)

Fall Session: September- December 2026

Course schedule: T, W, F 11.30- 12.20am: David Strong Building- C118

UVic Land Acknowledgement
We acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and W̱SÁNEĆ peoples whose historical relationships with the land continue to this day.

Instructor Information:
Name: Dr. Muthoni Nganga
Office: BEC 340
E-Mail: muthoni@uvic.ca
Office Hours: Wednesday, 2:30–3:30pm; Friday, 2.30-3.30pm. The default is in-person, although a video call via Zoom or MS Teams can also work – typically slots of 10-15 minutes. If you have questions about the course topics, please prepare beforehand by revising the material and doing the required readings.
You may also request an appointment outside the scheduled office hours. To request an appointment, please speak with me (the professor) after class (not email).
The specified office hours are professor office hours.
Note- There will be no office hours on October 28.

Communication

Always include the complete course code (ECON 365) in the subject line of your email. Without this information, I will not be able to respond. Emails should be limited to critical matters only. It is not advisable to ask class questions that require long answers or a discussion on email. They are both time consuming and often unclear especially when the student requires further clarification. You are encouraged to ask questions during class or office hours. I will not respond to emails that require long responses or those that can be answered using the course syllabus or Brightspace notices/ announcements. Please note that I will not respond to emails asking me to summarize what you missed in class or to tell you whether the missed content was important- **All classes are important.** It is your responsibility to attend class and to catch up on any materials you missed.
Students are advised to use their official Uvic email address for all course-related correspondence. Messages sent from non-Uvic email accounts may be filtered as spam and therefore may not be received.

Kindly use a professional tone in your emails.

I check and respond to emails on Tuesdays, Wednesdays and Fridays (apart from holidays) between 2.30-3.40pm. Emails received after this time will be responded to during the next scheduled email-checking period.

TA name and contact: Zhoumo Zhang pipilapilamora@uvic.ca

Nala Scott noramscott@uvic.ca

Teaching and assessment modality statement
This course is face to face and all exams are held in person. You are encouraged to bring your laptop and/or phone to class.

Course Content/ Description
Econometrics is both a science and an art: it combines economic theory, statistical methods, and computational techniques to analyze economic data. What distinguishes econometrics from statistics is its particular attention to the challenges that arise when standard statistical assumptions do not hold. These challenges are common in economics because economic relationships are complex and because economists often work with observational rather than controlled experimental data.

This is the first course in the ECON 365/366 sequence. Together, ECON 365 and ECON 366 provide a strong foundation for conducting basic empirical research and prepare students for more advanced undergraduate and graduate-level courses in economics.

The focus of ECON 365 is the *classical linear regression model*. We will examine how to choose estimation methods that are appropriate for the model under consideration, study the sampling properties of estimators, implement econometric techniques using statistical software, and assess the validity of the assumptions underlying our models.

In addition to traditional lectures, *learning by doing* is essential to developing a strong understanding of econometrics. Weekly laboratory sessions, in-class practice exercises, short random quizzes, assignments, midterm tests, and a final examination will provide opportunities to apply the concepts covered in class and assess your understanding. Keeping up with the material through consistent weekly practice is key to succeeding in this course.

The course is theoretical in nature and makes extensive use of matrix algebra. A strong background in matrix algebra is therefore necessary for success in ECON 365.

Course prerequisites/corequisites
These are available here. I assume that all students registered in the course have the prerequisites and that anyone who remains in the course without the prerequisites does so at their own risk.

Repeating Courses
A student may not attempt a course a third time without the prior approval of the Dean of the Faculty and the Chair of the Department in which the course is offered unless the calendar course entry states that the course may be repeated for additional credit. A student who has not received this approval may be deregistered from the course at any point and may be asked to withdraw from his or her declared or intended program.

Textbooks
Several alternatives are available. To cover the full ECON365–366 sequence, we recommend:

- **Greene, W. (2020),** ***Econometric Analysis*****, 8th Edition, Pearson** (earlier editions are also acceptable). [Chapters 1–6, 14, 20–21, plus Appendices A–D for ECON365]
- **Hansen, B. E. (2021),** ***Econometrics*****, Princeton University Press.** [Chapters 1–9, 11, 14–16]

The textbooks above use **matrix notation** throughout. Alternatively, students may use:

- **Wooldridge, J. (2020),** ***Introductory Econometrics: A Modern Approach*****, Cengage** (8th Edition; earlier editions are also acceptable). [Chapters 1–7, 9–12]
- **Vogelvang, B. (2005),** ***Econometrics: Theory and Applications with EViews*****, Pearson, Harlow.** [Chapters 1–7, 12–14]

- **Maddala, G. S. (1992), *Introduction to Econometrics*, 2nd Edition, Macmillan, New York.** [Chapters 1–4, 7–8, 13–14, 16]
- **Stock, J. H. and M. W. Watson (2020), *Introduction to Econometrics*, 4th Edition, Pearson** (earlier editions are also acceptable). [Chapters 1–7, 14–18]

The textbooks in the second group primarily use **summation notation**, but also include chapters that introduce and develop the transition to matrix notation.
The chapters listed in **[.]** indicate the material most likely to be covered in ECON365. In some cases, only selected sections of a chapter will be covered. More precise details will be provided in the corresponding lecture slides.

Brightspace

Brightspace is used extensively for the course. All students are expected to be fully functional with the system. The lecture materials, class exercises, assignments and important announcements will be posted in Brightspace. *Please note that the lecture notes online are only outlines of the actual lectures, and additional material and discussions will be covered during the lectures***.** All announcements will be posted in Brightspace. Students are advised to check it frequently.

Minimum Grade Requirements

A minimum grade of **B**, is strongly recommended as a prerequisite for ECON 366.

Learning Outcomes

By the end of the course, students should be able to:
- Understand the underlying statistical foundations of econometrics.
- Critically assess and interpret published econometric results.
- Formulate, estimate, and interpret econometric models.
- Write up the results of an economic study that incorporates econometric analysis.
- Use the time-series testing and estimation capabilities of different econometric software packages proficiently.

Course Structure, Assessments, and Grading

Lectures

Slides organized by topic will be posted on Brightspace before each lecture. I will use these materials as a foundation for further discussion and elaboration during class. There will also be occasional unannounced in-class quizzes designed to encourage engagement with and understanding of the course material. Regular in-person attendance is therefore essential for success in this course. Please note that lectures will not be recorded.

Labs

Building: Clearihue Building, **Room:** A031, Tuesday: 02.30 - 03:20pm or 03.30- 04.20pm
You should check your lab registration for your assigned venue and time.
Exercises for each lab will be posted on Brightspace. Throughout the course, we will use several econometrics software packages, including **EViews, R, Stata, and MATLAB**.
Labs will cover formal course material and will run throughout the term, beginning in the second week of classes. There may be one or two weeks without labs, particularly in the weeks leading up to major exams. Announcements will be posted on Brightspace in advance whenever labs are not scheduled. There will also be no labs during Reading Week. Lab sessions will be led by the TAs.
The primary goal of the lab sessions is to help you learn how to apply the techniques introduced in lectures to empirical applications. Working through these applications will also reinforce your understanding of the

material covered in class. In addition, the lab exercises will help you prepare for the empirical questions in the assignments, midterm test, and final examination.
Regular attendance is therefore strongly encouraged. Lab sessions will not be recorded.

Use of AI

AI tools may be used as a learning and research aid for take-home assignments, but they may not be used during in-class assessments, labs, quizzes, or examinations unless explicitly authorized by the instructor.
You may use AI tools to support your learning and analysis. For example, to help identify or troubleshoot the appropriate code needed to run an econometric analysis. However, you are responsible for understanding the code, checking that it is correct, adapting it appropriately to your data. Using AI to generate code does not relieve you of responsibility for understanding and being able to explain the analysis.
You must perform your own analysis and interpretation.
If you use AI in an assignment, you must clearly acknowledge and cite its use and briefly explain how you used it.
Note that AI tools can produce incorrect information, fabricated references, or faulty code. You are responsible for ensuring that all submitted work is accurate and supported by appropriate sources.
Mis-use of AI will be deemed to be a Violation of Academic Integrity.

Course assessments

Course Grade

Your final course grade will be determined as follows:

In-class quizzes (5): 10%

There will be several closed-book, in-class quizzes conducted randomly throughout the term. Your best five attempts will count toward your final grade, with each quiz worth 2%.
The quizzes are designed to encourage active learning and provide opportunities for you to engage with the course material and assess your understanding. Difficulty completing a quiz should be viewed as a signal that you may need to review and work further on the related material.

Midterm test (2): 15% — mandatory

Test 1: October 20- The midterm tests will be 30- 40-minutes, in-person test, scheduled during your regular lab session. The test will include a combination of multiple-choice and fill-in-the-blank questions, and may also include empirical exercises to be completed using the econometric software packages covered in the course.

Test 2: October 28- This will be a 40-minutes closed book in-person test, scheduled during your regular class time. The test will include a combination of multiple-choice and short answer questions- including interpretations.

Only one out of the two midterm exams will count toward your final grade; the lower score (of the two) will be dropped automatically. If you miss one midterm, that will be the one excluded- no penalty and no need to email me. However, if you miss both midterms, you will receive a grade of zero for the midterm grade and an "N" final grade. Please note that no make-up midterm exams will be offered. This policy already accounts for missed midterm exam situations.

Assignment (1): 40% — mandatory

The assignment will provide you with an opportunity to engage more deeply with the course material and develop your skills in using econometric software. In applying concepts from the lectures, labs, and textbook to a specific context, you will strengthen your understanding of the material. The assignment is also designed to help prepare you for the final examination.

Notes on collaboration and independent work:

Students may collaborate with one other student working on the same country data to discuss data, econometric methods, software, and technical issues. Collaboration must be declared in advance, and collaborators should attend review meetings together.

Each student must submit their own independent work, including their analysis, interpretation, and written presentation. Joint submission is permitted only with explicit instructor approval following the review meeting. All assistance and sources must be appropriately acknowledged.

Two in-person meetings with the instructor:

- **Week of November 1:** Compulsory for collaborating students who wish to discuss their collaboration and determine whether they may submit one copy. Students who are collaborating (chose one country and discussing analysis) must attend together, regardless of whether they intend to submit jointly. It is optional for other students. If you are collaborating/ using same country data and you fail to attend the meeting, there will be a 30% penalty on your final grade.
- **Week of November 29 (mandatory for all):** All students must attend to review their progress. You can only attend the meeting after you have submitted the first draft- see submission deadline below.

Submission

First draft: A first draft to allow formative feedback is due **November 14**, with an extended no-penalty deadline of **November 21.** After November 21, a 10% deduction from the grade will apply, on the first draft grade portion, per day (or part of a day) late.

Final draft: Following the compulsory in-person meeting and feedback, the final submission is due **December 15**. Late final draft submissions will attract a 10% penalty per day (or part of a day) on the final (total) grade.

Your grade will reflect both the written submission and your discussion of the work during the meeting. Failure to attend the compulsory meeting will result in an 80% penalty on the final assignment grade.

Please also refer to the Use of AI section of the syllabus for the rules governing the use of AI tools.

Assignments must be submitted through Brightspace. See assignment on Brightspace for assignment details and submission guidelines.

<u>Final examination: 35% — mandatory</u>

The final examination will be comprehensive and will consist of a two-hour exam. The date, time, and venue will be determined by the Examinations Branch; the examination schedule is typically posted in late October.

The grading scale and interpretation of grades provided in the table below will help you interpret your final course grade.

Formula Sheet Policy

For both the Midterm tests and Final Examination, you may bring one formula sheet, either handwritten or typed, on both sides of one 8½ × 11-inch sheet of paper. The formula sheet may contain formulae only. Any sheet containing information other than formulae will be confiscated.

Further details about the examinable material and the format of the midterm lab test and final examination will be provided in class closer to the assessment dates.

Note on missed assessments/ request for grade shifting: The weight of any assessment item cannot be shifted to any other assessment item.

Please note that the assessment components during the term have built in flexibility for all students. Only 5 random class quizzes will count towards your final grade. Only one out of the two midterm tests will count toward your final grade. As such, no make-up a class quizzes or midterm tests will be given. For the assignment, see the provided flexible deadlines and late submission penalties.

Mandatory/Essential Course Components
All mandatory assessments are essential course requirements and must be attempted to pass the course.

Dates of Assessments, Due Dates of Assignments
Weekly quizzes: Random days.
Assignment: See assignment section above for all dates – submission and meetings
Midterm assessments: October 20 and October 28- see details above
Final exam: In person

Students are advised not to make work or travel plans until the examination timetable has been finalized. Students who need to finalize their travel plans earlier should book flights that depart after the end of the examination period. Please note that students will not be eligible for an academic concession if their travel plans conflict with a scheduled examination.

Grading Scale:

Passing Grades	Percentage
A+	90-100
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
C+	65-69
C	60-64
D	50-59
Failing Grades	
F	0-49
N	0-49

Students should review the University's more detailed summary of grading.

Course Policies
This course adheres to the Department Course Policies of the Department of Economics that deal with the following issues:

- Academic concessions
- Academic integrity (plagiarism and cheating)
- Attendance
- Grading
- Inclusivity and diversity
- Late adds
- Late assignments
- Repeating courses
- Review of an assigned grade
- Students with a disability
- Term assignments and debarment from examinations

- Travel plans
- Waitlists

The following policies are explicitly included because of their importance.

Waitlist Policies

- Instructors have no discretion to admit waitlisted students or raise the cap on the course.
- Students on the waitlist should discuss with the instructor how to ensure they are not behind with coursework in the event they are admitted.
- Registered students who do not participate as specified in this outline during the first 7 calendar days from the start of the course may be dropped from the course. [Note: for short, two-month summer courses the policy is the first two class meetings.].
- Registered students who decide not to take the course are responsible for dropping the course and are urged to do so promptly out of courtesy toward waitlisted students.
- Waitlist offers cease after the last date for adding courses irrespective of published waitlists.

Academic Integrity

Academic integrity is fundamental to all scholarly work. At the University of Victoria (UVic), students are expected to comply with the university's academic regulations and must not engage in acts of dishonesty, falsification, misrepresentation, or deception in any academic work. Violations of the University's academic integrity policy may result in academic or disciplinary consequences.

Student Code of Conduct

The Humanities, Science, and Social Sciences Faculties have adopted this Student code of conduct. Please, review.

Appeals

Depending on the nature of your concern, the order in which you should normally try to resolve the matter is:

1. Me, the course instructor
2. the Associate Chair: econassoc@uvic.ca
3. the Associate Dean of Academic Advising
4. the Senate.

If you're seeking a formal review of an assigned grade, you should also consult the regulations in the academic calendar regarding review of an assigned grade.

[Include your process of dealing with grade inquires on assignments and exams. E.g, "I only respond to grading inquiries in writing. You must file your question within 1 week of issuance of your grade and the release of the answer key. Do not approach me after class to discuss grading concerns."]

University Policies and Statements

Please note that this course is executed in a manner consistent with these University statements and policies.

a. University Calendar - Section "Information for all students"
b. Creating a respectful, inclusive and productive learning environment
c. Academic Integrity
d. Academic Concession Regulations, Academic Concession and Accommodation, Academic Accommodation – Policy AC1205
e. Accommodation of Religious Observance
f. Student Conduct
g. Accessibility

h. Diversity / EDI
i. Equity statement
j. Sexualized Violence Prevention and Response
k. Discrimination and Harassment Policy

Resources for students

a. Student wellness
b. Centre for Accessible Learning
c. UVic Learn. UVic Learn is the primary learning resource for students that offers many learning workshops and resources to help students with academics and learning strategies.
d. Library resources
e. Academic Skills Centre (ASC)
f. Learning Assistance Program (LAP)
g. Academic Advising
h. Economics Undergraduate Advising: ecadvice@uvic.ca
i. Student Awards and Financial Aid
j. International Student Advising
k. Indigenous student services (ISS)
l. Student groups and resources including UVic Ombudsperson

Student Experience of Learning (SEL) Survey

I value your feedback on this course. Towards the end of term, you will have the opportunity to complete a confidential SEL survey regarding your learning experience. The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future.