



ECON 345 A01

Applied Econometrics

Winter Session: 202609 – First Term, Fall 2026; CRN: 11131; Units: 1.5; Contact hours (lecture/labs/tutorials): 3/1/0; Course schedule: MR 11:30-12:50 FRA192

UVic Land Acknowledgement

We acknowledge and respect the Lək'wəḡən (Songhees and X̱wsepsəm/Esquimalt) Peoples on whose territory the university stands, and the Lək'wəḡən and W̱SÁNEĆ Peoples whose historical relationships with the land continue to this day.

Instructor Name: Martin Farnham

Office: BEC 354

Method of contact and availability: mfarnham@uvic.ca

I can't always respond to student inquiries immediately. I will try to respond reasonably quickly, but sometimes may take as many as two business days to respond. If you haven't heard from me within two business days, please send me a reminder email. Note that I won't respond to inappropriate emails (see email policy below)

Office Hours: Mondays 1:00-2:30pm or by appointment.

TA Name(s): TBA

Office: TBA

Email: TBA

Office Hours: TBA

Teaching and assessment modality statement

This course is face to face and all exams are held in person.

Note that I will be out of town for the lecture on Monday September 28. I will either supply a video lecture for that day or have a guest deliver the lecture.

Course Content

Our world is awash in data, so how can we use those data to better understand our world? This course provides a general introduction to the practice of econometric analysis. We will focus largely on multiple regression techniques in cross-sectional data analysis (as well as time series analysis), considering common issues and problems that arise in applied empirical research. While motivated by intuition and applications, the presentation of estimators and tests will be primarily mathematical in nature. Students will learn *R* — a freely available and widely used statistical programming language — to analyse and plot data, draw inference, and compare alternative modelling approaches. The course closely follows the textbook “*Introductory Econometrics: A Modern Approach*” by J. Wooldridge.

Course prerequisites/corequisites

To register, you must have completed the following pre-requisites:

One of [ECON103, ECON103C, ECON180]; ECON 104; one of [ECON246, STAT261]; one of [ECON225, ENGR120, ENGR240]; and one of [MATH100, MATH102, MATH109].

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.

Textbook

Lecture Textbook (required): The required textbook for this course is “*Introductory Econometrics: A Modern Approach*,” (Eighth Edition) by J. Wooldridge. You are welcome to buy a used copy and/or use earlier editions.

Lab Textbook (optional): Labs will be based on the statistical programming language R. The optional textbook “Using R for Introductory Econometrics” (Heiss, 2016) provides code to complete the exercises in Wooldridge and is freely available online at: <http://www.urfie.net/>

Brightspace

Brightspace is used extensively for the course. All students are expected to be fully functional with the system. The lecture notes will be posted in *Brightspace*. Please note that the lecture notes online are only outlines of the actual lectures.

All announcements will be posted in *Brightspace*. Students are advised to check it frequently.

Lectures will be much easier to follow if you read lecture notes ahead of lecture. I will generally endeavor to post lecture notes online ahead of lecture.

Minimum Grade Requirements

There is no minimum grade requirement for ECON345 to complete a major in Economics. However students who wish to apply to the BA Honours Program should achieve a grade of at least B+ in this course.

Learning Outcomes

In this course you will gain an understanding of econometric methods and their applications. You will learn how to analyse data and the basics of econometric theory that underpins econometric analysis. You will also learn to be more discerning reader of statistical claims, and develop a critical eye for the methods used by those making the claims. The course leads to highly transferrable modelling and programming skills through lab-based instruction using the statistical programming language *R* (widely used in academic research, government roles, and the private sector).

Course Structure, Assessments, and Grading

Statement about learning components

Lecture notes will be posted online, but lectures are not recorded. Students will benefit from supplementing the lecture notes by reading the relevant parts of the text. I will distribute ungraded problem sets and solutions throughout the course. One of the best ways to develop your understanding of the material is to work those problem sets carefully without viewing the answers. Much more learning happens when you struggle with difficult material than when you skip the struggle and go straight from the problem to viewing the correct answer. Similarly, actively participating in labs will help you to understand *R* sufficiently to successfully complete the lab exam given at the end of the term.

Students are encouraged to work on problem sets in groups after first carefully attempting them individually.

Use of AI

Assessment is entirely through in class exams. Any student using AI or any other prohibited resource during an exam will be subject to sanctions under the University's policy on Academic Integrity.

Grading Scheme

All assessment is done through in-class exams. There are 2 midterm exams (neither is mandatory); 1 lab exam (mandatory), and 1 final exam (mandatory).

The course grade is determined as follows:

Best of 2 midterms (no makeup midterm exams will be given):	40%
Lab Exam:	15%
Final Exam:	45%

Mandatory/Essential Course Components

Only the final exam is an essential component of the class and thus deferrable. Midterms and the lab exam are not deferrable. Because you already have two chances to earn your 40% for the midterm exams, no makeup midterms will be given, even in the event of illness or family affliction.

Dates of Assessments, Due Dates of Assignments

All exams are in person.

Midterm(s): The midterm exam(s) is/are scheduled for October 5 and November 5. The first midterm will cover roughly through univariate regression; the second midterm will cover roughly through functional form and model specification (Chapter 6).

Lab exam: The lab exam will be held on your last lab session of term (either December 1 or December 2 depending on the lab session you are registered for). It will cover lab material from throughout the term.

Final exam: The final will be cumulative. It will be scheduled by the registrar.

Students are advised not to make work or travel plans until after the examination timetable has been finalized. Students who wish to finalize their travel plans at an earlier date should book flights that depart after the end of the examination period. Students do not qualify for an academic concession if travel plans conflict with the examination.

Grading Scale

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%
F or N	0-49%

Students should review the University's more detailed [summary of grading](#).

Missing Assessments

Should students encounter a situation where they miss the final, they may qualify for an academic concession. Students are required to indicate the specific grounds on which they are requesting an academic concession and provide a justification outlining the impact of the circumstances on their ability to complete course requirements. In case you miss the final exam, fill in a [request for a deferral](#). I will not respond to informal requests of academic concessions.

If you miss a midterm, you will receive a grade of 0 on it. Since your midterm grade for the course is the better of your two midterm grades, your score on the other midterm will determine your midterm grade. If you miss both midterms, you will receive a score of 0 for the midterm component of your grade. In such a case, to pass the course you would need to receive 100% on the final.

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.
- 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.

Academic dishonesty includes, but is not limited to, copying from another student's exam, consulting hidden notes during the exam, communicating with others during the exam, using technology (phones, smart watches, smart glasses, earbuds) to access online or other resources during an exam.

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](#).

I only respond to grading inquiries in writing. You must file your question within 1 week of issuance of your grade or the release of the answer key, whichever comes later. 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.

Course Structure

Topic	Wooldridge Readings
Course Introduction & Statistics Review	Math Refresher/Appendix A-C
Introduction to Econometrics	Chapter 1
Univariate regression	Chapter 2

Multivariate regression	Chapter 3
Inference	Chapter 4
Asymptotics	Chapter 5
Further Issues: Functional Form & Model Specification	Chapter 6
Binary Variables	Chapter 7
Introduction to Time Series (time permitting)	Chapter 10 + Further Reading
Heteroskedasticity (time permitting)	Chapter 8
Causality & Instrumental Variables	Chapter 15 + Further Reading

Key Dates:

Midterm 1: Monday October 5 (in class)

Midterm 2: Thursday November 5 (in class)

Lab Exam: In your last lab session of the term (December 1 or 2 depending on your lab section)

Final Exam: To be set by the registrar.

E-mail Correspondence

Emails should be limited to critical matters, such as inability to attend class, an exam, or prolonged illness, and should include the course name and number in the subject line. Questions on course material should be asked during office hours or in class, not by email. The standard format for writing a letter must be used. This means it should begin with a salutation (e.g. Dear....), include full sentences and it must conclude with a signature that includes your **full name and V#**. Text message lingo should not be used. If you send an email that asks a question that is covered on the syllabus or was addressed during lecture or on Brightspace, I reserve the right to ignore it. Please do your part to reduce unnecessary emails.

Electronic Devices

Please do not use electronic devices in a way that is distracting to anyone else in the classroom. Lectures may only be recorded (audio or video) with the instructor's written permission and only for the purpose of enhancing the individual student's learning in the course. Recordings may not be distributed without the instructor's permission.

Educational Technology involving storage outside Canada

Not applicable