



ECON 346 A01

Applied Econometrics II

Winter Session: 2024 09 – CRN 11120 (course registration number), Unit Value 1.5, Course schedule: 10:00 AM - 11:20 AM M & Th, Room: MAC D016. (Labs B01, CRN 11121, 2:30 PM - 03:20 PM Wednesdays, Room: CLE A108)

UVic Land Acknowledgement

We acknowledge and respect the Ləkʷəŋən (Songhees and Esquimalt) Peoples on whose territory the university stands, and the Ləkʷəŋən and WSÁNEĆ Peoples whose historical relationships with the land continue to this day.

Instructor Name: Dr. Donn Feir

Office: BEC 371

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Office Hours: 3:30 pm-4:30 pm Mondays

Course Content

Calendar Entry: The application of econometric methods to practical data analysis problems, with emphasis on the correct interpretation of empirical evidence. Topics include hypothesis testing, panel data, time series, causality, as well as further econometric methods applied to a range of empirical problems. Assessment may include an empirical project.

Course Format: This course will include in-person lectures and discussions, as well as labs that require student engagement. Occasionally, online lectures will be provided on Brightspace when necessary due to other instructor duties that prevent in-person lectures.

Course Description: This course involves building theoretical knowledge about econometrics and practical skills in data analysis. The course will focus on providing the foundations to apply cutting-edge methods used by economists in causal analysis and prediction. Building your knowledge and practical skills in implementation requires students to work through the applications and discuss theoretical limitations associated with these applications. Thus, your active participation will be critical in gaining the most from this course. Completing econometric analysis is an art and a science that must be conducted with consideration for research and data ethics. You will build your capacity as an applied econometrician through assignments, classroom and lab lectures, discussions, preparation for knowledge checks, and a creative, independent research project.

Learning Outcomes

1. In this course, students will learn to critically implement and evaluate several advanced techniques in applied econometrics and functionally use and interpret basic statistical techniques.
2. After completing this course, students will also be able to responsibly consume research that uses applied econometric techniques to inform policy in the real world.
3. Students will build their independent research skills and skills in presenting econometric findings.
4. Students will also be able to explain critical elements of econometric theory related to the techniques, which will help them be better data users.
5. Students will be able to use at least two forms of statistical software. This flexibility in coding skills is highly valued in today's workplace and will be in the future.

Objective 1 will be achieved through participation in labs and assignments, as well as through actively engaging in classroom lectures and activities, as well as self-reinforcing learning by preparing for knowledge checks. Objective 2 will be achieved through class discussions, preparation of knowledge checks, the research project, and problem sets. Objective 3 will be achieved through the research project. Objective 4 will be achieved through actively engaging in classroom lectures and activities and self-reinforcing learning by preparing for knowledge checks. Objective five will be achieved through participation in labs and assignments.

Course prerequisites/corequisites

An understanding that no authentic learning is passive: you are a human and not a vessel knowledge can be poured into. This course cannot achieve its learning objectives without you working to meet them. From a university program perspective, students must have completed Economics 225 (Writing for Economists) and one of either Econ 345 (Applied Econometrics I) or Econ 356 (Econometrics: Part I).

Textbook

The primary textbook for this course is "Introductory Econometrics: A Modern Approach" (Seventh Edition) by J. Wooldridge. Journal articles will supplement the text and will be made available. While the textbook is not required, it is highly recommended. I also recommend the free textbook "Introduction to Econometrics with R" by Hanck, Arnold, Gerber, and Schmelzer. It can be downloaded from <https://www.econometrics-with-r.org/>.

Brightspace

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

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

Grading

Grading Scheme

The course grade is determined as follows:

Knowledge Checks: There will be three in total in class. The two best will be worth 20% of your grade, and the worst, 10%. (50% overall).

Participation: There are two components of participation. The first is participating in class discussions (5%). The second is participating in the labs (2%) and submitting your problem sets promptly at the end of specified labs (3%). Problem sets are not explicitly graded but graded based on pass or fail, depending on the sincerity of the attempt. (10% overall).

Final project: This project will be handed in three phases. The first will be a topic proposal (5%), the second will be a draft of the paper (15%), and then the final paper (10%). The topic proposal must be approved before moving to the draft and final phases, and the proposal must match what is written in the paper. Students also agree to a potential pop quiz related to their final project that they must pass to receive a grade for their project. You must also submit a “replication package,” which includes your annotated code and data. (30% overall).

Required Course Components

Students must write at least two of the three midterms. Students must also submit their research topic for approval and receive approval before proceeding with their final project. The final project and draft must align with the submission. If a student is randomly selected for a pop quiz related to their research project, they must sufficiently pass it to pass the course.

Dates of Assessments, Due Dates of Assignments

Knowledge Check One: October 3rd, 2024.

Knowledge Check Two: November 4th, 2024.

Knowledge Check Three: December 2th, 2024.

Lab Problem Set One*: September 25th, 2024

Lab Problem Set Two*: October 23rd, 2024.

Lab Problem Set Three*: November 20th, 2024.

**Note that these problem sets are due at the end of the lab time, 3:20pm Wednesdays. Other practical problems and problems related to theory will be discussed in the labs to support you with your submitted problem sets, knowledge checks, and research proposals.*

Research Proposal: October 7th by 10am, 2024.

Draft Outline (Optional): October 28th by 10am, 2024.

Draft Paper (It is optional to submit a draft replication package): November 18th by 10am, 2024.

Final Paper (Including replication package): December 9th by 10:00 am, 2024.

Grading Scale

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

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

Missing Assessments

Should students encounter a situation where they miss an exam or cannot submit an assignment at its due date, they may qualify for an academic concession. Students are required to indicate the specific grounds on which they are requesting an academic concession and to provide a justification outlining the impact of the circumstances on their ability to complete course requirements. For in-course extensions, please [fill in the form and follow the instructions on the form](#). I will not respond to informal requests of academic concessions. If you miss more than one of the midterms or cannot complete your final project to the specified timelines, fill in a [request for a deferral](#).

Note that the class grading scheme has built-in flexibility. If you miss submitting a problem set at its due date, the grade penalty is minimal. Missing one midterm may be accommodated without requiring a formal concession but by alternative arrangements with the instructor.

Course Policies

This course adheres to the [Undergraduate 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
- Sexualized violence prevention and response
- 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.
- 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 requires commitment to the values of honesty, trust, fairness, respect, and responsibility. Students are expected to observe the same standards of scholarly integrity as their academic and professional counterparts. A student who is found to have engaged in unethical academic behaviour, including the practices described in the [Policy on Academic Integrity](#) in the University Calendar, is subject to penalty by the University.

Review [What is Plagiarism](#) for the definition of plagiarism. Note: Submitted work may be checked using plagiarism detection software.

Student Code of Conduct

The Humanities, Science, and Social Sciences Faculties have adopted this [Student code of conduct](#). Please, review.

University Policies

- University Calendar - Section "[Information for all students](#)"
- [Creating a respectful, inclusive and productive learning environment](#)
- [Accommodation of Religious Observance](#)
- [Student Conduct](#)
- [Non-academic Student Misconduct](#)
- [Accessibility](#)
- [Diversity / EDI](#)
- [Equity statement](#)
- Discrimination and Harassment [Policy](#)
- [Policy on Human Rights, Equity and Fairness](#) - The University is committed to promoting, providing and protecting a positive, supportive and safe learning and working environment for all its members.

Sexualized Violence Prevention & Response

UVic takes sexualized violence seriously, and has raised the bar for what is considered acceptable behaviour. Students are encouraged to learn more about how the university defines sexualized violence and its overall approach by visiting www.uvic.ca/svp. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). Contact svpcoordinator@uvic.ca.

Resources for Students

[UVic Learn Anywhere](#) - UVic Learn Anywhere is the primary learning resource for students that offers many learning workshops and resources to help students with academics and learning strategies.

[Centre for Accessible Learning](#) - Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, you are free to approach me; however, you must register with the [Centre for Accessible Learning](#) (CAL) for formal arrangements to be made. The CAL staff are available by appointment to assess specific

needs, provide referrals and arrange appropriate accommodations. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

[Centre for Academic Communication](#) - Offers coaching on [academic integrity](#), including preventing accidental plagiarism. Provides support to students with time management, reading, writing, speaking, understanding academic expectations, and other aspects of academic communication as well as creating academic posters, blogposts, PowerPoint slides, and e-portfolios.

[Health Services](#) - University Health Services (UHS) provides a full service primary health clinic for students, and coordinates healthy student and campus initiatives.

[Support Connect](#) - a 24/7 mental health support service for students

- Toll-free (calls from North America): 1-844-773-1427
- International collect calls: 1-250-999-7621

[Counselling Services](#) - Counselling Services can help you make the most of your university experience. They offer free professional, confidential, inclusive support to currently registered UVic students.

[Indigenous Student Services](#) - Indigenous UVic students have access to many sources of support on campus. Before, during and after your time at UVic, you are encouraged to explore programs and services available to you, such as [Indigenous counselling services](#) and the [Elders in Residence](#), as well as non-academic programs that may be of interest to you.

[International Student Support](#) - The University of Victoria offers a number of resources to support international students as they pursue their studies. UVic's [International Centre for Students](#) is the primary office supporting international students on campus at the university-wide level and provides various supportive program through the [UVic Global Community Initiative](#), including a Mentorship Program and Conversation Partner Program.

For academic advising-related questions, students in the Economics Department are also encouraged to meet with the Economics Undergraduate Advisor (Brooklynn Comish-Trimble, ecadvice@uvic.ca) as well as an academic advisor in the [Academic Advising Centre](#) early in their studies to help map out a plan to declare a major and complete university program requirements. Other resources include the [Centre for Academic Communication](#) and the [Math and Stats Assistance Centre](#).

The International Student Liason in the Economics Department is Dr. Paul Schure who can help you connect with other international and domestic students in the Department. His email address is schure@uvic.ca. Please, reach out if you are interested.

Course Experience Survey (CES)

I value your feedback on this course. Towards the end of term you will have the opportunity to complete a confidential course experience survey (CES) 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.

When it is time for you to complete the survey, you will receive an email inviting you to do so. If you do not receive an email invitation, you can go directly to the [CES log-in](#). You will use your UVic NetLink ID to

access the survey, which can be completed on your laptop, tablet or mobile device. I will remind you nearer the time, but please be thinking about this important activity, especially the following three questions, during the course.

What strengths did your **instructor** demonstrate that helped you learn in this course?

Please provide specific suggestions as to how the **instructor** could have helped you learn more effectively.

Please provide specific suggestions as to how this **course** could be improved.

Course Structure

*Note that timing will adapt to class needs.

Topic	Chapter	Week	Due Dates and Exam Information
Introduction to course and topic, causality	Chapter 1	1	
Causality continued; Independent Research Projects	Chapter 19	2	Labs Begin
Review of OLS and Inference	Chapters 2/3/4/5	3	
Review Specification and Data Issues	Chapter 6/7/8/9	4	Problem Set One Due at the end of lab, Sept 25 th
No class on Monday, then Knowledge Check One		5	Knowledge check one, Oct 3 rd
Review Limited Dependent Variable Models	Chapter 17	6	Research Proposal Due, Oct 7 th at 10am
Review and New Time series (Thursday Virtual Lecture)	Chapters 10/11/12	7	
Time series and Panel Data (Virtual Lectures)	Chapters 13/14	8	Problem Set Two Due at the end of lab, Oct 23
Panel Data	Chapters 13/14	9	
Simultaneous Equations and IV (Thursday Virtual Lecture)	Chapter 15/16	10	Knowledge Check Two, Nov 4 th
Difference-in-Difference	Selected readings on Brightspace	11	
Advanced Topics	Selected readings on Brightspace	12	Problem Set Three Due at the end of lab, Nov 20; Draft Paper Due Nov 18 th at 10am
Advanced Topics	Selected readings on Brightspace	13	
Knowledge Check Three		14	Knowledge Check 3, Dec 2 nd ; Last Day of Classes

*Final paper draft and replication package due December 9th at 10am PT.

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. 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.

Electronic Devices

Electronic devices should not be used in class unless the instructor pre-specifies we will jointly work on something as a class or in groups, similarly for the labs. Electronic devices are not permitted during knowledge checks.

Use of AI

AI can sometimes be a helpful coding assistant for your final project. However, AI should not be used for writing or to generate statistical output. You should also not use AI for coding help if you cannot go through the code line by line with your instructor during a pop quiz related to your final project. Not being able to explain your code will result in a failing grade.

Educational Technology involving storage outside Canada

[If you use educational technology that stores personal information outside of Canada, students need to be informed in advance. Suggested wording for course outline below. More info in Instructors Guide.]

The following educational technologies, which stores or accesses your personal information outside Canada, is required for this course: [LIST EDUCATIONAL TECHNOLOGY USED]. I will make you aware if this list changes.

Personal information is required by the service. The privacy policy and the terms of use list the personal information stored outside of Canada and are available at [INCLUDE LINKS]. I encourage you to read these documents.

If you are not comfortable with your personal information being stored outside of Canada, please speak to me within the first week of class about using an alternative (such as using an alias or nickname). Otherwise, by continuing in this course, you agree to the use of the educational technology in the course and the storage of personal information outside of Canada.