

ECON 468 A01 Financial Econometrics

Winter Session: 2024 09 - CRN 11139, 1.5 units, Contact hours: 3 per week

Course schedule: TWF 1:30-2:20 in MAC D016

UVic Land Acknowledgement

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

Instructor Name: Dr. Ken Stewart

Office: BEC 352

E-Mail: Please see the section on Email Correspondence toward the end of this course outline.

Office Hours: TWF 10:00-11:00 in person, or by appointment.

Teaching Assistant: The TA will be announced on Brightspace when one is assigned.

Course Content

An introduction to time series econometrics through the medium of financial applications. The lognormal model of asset returns and the random walk model of stock prices. Variance ratio tests of the random walk/martingale hypothesis. Stationary versus nonstationary stochastic processes. Autocorrelations and tests for temporal dependence. Trend stationary versus difference stationary models of nonstationarity. ARMA models for stationary variables. GARCH models of volatility clustering. Unit root tests and cointegration.

Learning Outcomes

Your learning in this course will occur primarily through weekly assignments. The role of the lectures is to motivate and support your work on those assignments. Each assignment will have its learning outcomes stated.

Course prerequisites/corequisites

One of Econ 305 or Com 240; one of Econ 345, Econ 365, Stat 350, or Stat 353. Econ 435 recommended.

Textbook

There is no textbook. Teaching materials will be provided via *Brightspace*. The only for-purchase resource that you will need is an iClicker Cloud subscription. See the information below on the role of the iClicker classroom response system in the course.

Brightspace

Brightspace will be our learning management system through which assignments, teaching materials, TA office hours, and other information will be disseminated. This includes a Log of Class Progress that I update daily indicating the topics of each lecture and how you should prepare for the upcoming class.

Brightspace also has a gradebook, allowing you to verify that your assignment and exam grades and clicker scores have been recorded correctly. The *Brightspace* gradebook is the final and definitive grade record that is used to calculate your course grade. If a grade for any item of evaluation does not appear correctly, you should notify me promptly.

Course Structure

The course structure will follow the topics list of the Calendar course description. For a detailed indication of the progress through the early topics, see the Table of Contents of Handouts 1-7, posted to *Brightspace*.

Grading

Grading Scheme

Your course grade will be determined according to the best of the following two grading schemes. This will be done automatically at the end of the course; no action on your part is necessary. Essentially, Grading Scheme 2 allows you to compensate for weak exam grades with a stronger class participation grade if it turns out to be in your interest to do so.

	Scheme 1	Scheme 2	
Assignments	40%	40%	
Midterm Exam	20%	15%	(Wednesday October 16)
Final Exam	40%	30%	
Class participation	0%	15%	(Assessed with the iClicker system)

The Faculty of Social Sciences grading policy adopted in 2017 prohibits instructors from releasing final exam grades or course grades until after course grades are submitted to Records Services by the Department. Be aware that the posting of your final exam grade to Brightspace will be delayed for this reason.

Mandatory/Essential Course Components

Except as may be prescribed by broader university policies, no component of the evaluation in this course is mandatory. To pass the course you need only achieve an aggregate grade of at least 50%,

according to one of the above grading schemes. Consequently, only the final exam is eligible for deferment, upon approval of a formal *Request for Academic Concession* (RAC).

Dates of Assessments, Due Dates of Assignments

Assignments are normally due by noon Thursday.

Midterm: The midterm exam is scheduled for Wednesday October 16. It will cover the lecture material and assignments up to that date.

Final exam: There will be a 2 hour final exam held during final exam period.

Grading Scale

A+	Α	A-	B+	В	B-	C+	С	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.

Assignments

Assignments are submitted to the box labelled *ECON 468 A01*, located in the corridor by the Economics Department office on the third floor of the Business & Economics Building. For your grade to be properly recorded, be sure to indicate clearly your name and student number on your assignment. It should also indicate *ECON 468 A01*. In their haste students sometimes inadvertently put their assignment in the wrong box. Even if it has your name and student number, another instructor receiving your assignment will have no idea how to redirect it unless the course is also indicated.

The assignments in this course play a central role in helping you learn the material and prepare for exams. You may work jointly with other students on assignments. However, the assignment solutions you submit for grading should be your own work, independently written up.

The use of artificial intelligence (AI) is not permitted. Use of AI is a violation of UVic's *Policy on Academic Integrity*.

Assignment Sketch Answers are posted to *Brightspace* following the return of graded assignments. Questions about the grading of an assignment should be raised promptly during the TA's next office hour, while the grading scheme is fresh in their mind. The TA's office hours are given on *Brightspace* and are solely for the purpose of answering questions about assignment grading. Old assignment grades will not be revisited at the end of the term.

Class Participation Grade

The Class Participation component of Grading Scheme 2 will be determined with the iClicker Cloud system, which is the UVic-endorsed and supported classroom response system:

https://www.uvic.ca/systems/services/learningteaching/iclicker/index.php

It will be used to record your responses to questions that will occasionally be posed in class. You must create an iClicker Cloud subscription according to the instructions given at

https://mhe.my.site.com/iclicker/s/article/How-to-Create-an-iClicker-Student-Account

It offers a two-week free trial should you decide to drop the course.

We will begin using iClicker Cloud on Friday September 6, and scores will be uploaded to *Brightspace* every couple of weeks. Your class participation score for the term will be the total of all correctly answered questions, so all questions are worth the same amount. However, up to 4 incorrect or unanswered questions over the term will not prevent you from earning full points. For example, suppose that 54 questions are asked during the term and that you correctly answer 40 of them. Then your class participation grade out of 15 is $15 \times 40/(54-4)=12$. Only 50 questions would have to have been answered correctly to achieve full points of 15/15.

It is your responsibility to ensure that you have iClicker Cloud access through your mobile device, typically your phone. Lack of access because, say, you forgot to charge your phone, is covered through the "four forgiven questions" rule.

The purpose of the iClicker system is to recognize attendance and alertness to the lecture material. You cannot expect to be so rewarded if, for whatever reason, you are unable to attend or participate. This includes medical excuses and the many other legitimate reasons why students are sometimes absent. You should hold your "four forgiven questions" in reserve to cover such contingencies.

For the same reason, it is not acceptable to submit iClicker answers on behalf of other students. You should only be using your own iClicker Cloud access.

Clicker questions are **not** posted subsequently. If you wish to have a record of them for studying, you should record them as they are posed.

End-of-term Travel

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.

Course Policies

This course adheres to the <u>Undergraduate Course Policies</u> 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.
- Any students who are still waitlisted in a course after the course add deadline, should stop attending/completing coursework. Students are responsible for being aware of this deadline and will not be eligible for credit in the course despite continuing to complete coursework.

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 <u>Policy on Academic Integrity</u> 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. The University reserves the right to use a plagiarism software to detect violations of academic integrity.

Student Code of Conduct

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

Classroom Etiquette

You will find that it is my normal practice to begin class promptly on the half-hour and lecture for the full 50 minute class period. Students are expected to make whatever arrangements may be necessary in their private lives to ensure that they are seated in class prior to the beginning of lecture. It is not acceptable to disturb the class by habitually arriving late.

If you have a question about the lecture material that you have not had time to raise during a lecture, please do not attempt to raise it with me individually at the end of class. There are only 10 minutes between classes and I am obliged to clear the room promptly out of consideration to the incoming

instructor. Instead see me during my office hours or raise your question at the beginning of the next class, when I often invite questions. My favourite way to introduce a new lecture is by responding to questions about the previous one.

For the same reason, there is no point attempting to discuss personal matters such as illness accommodation in class. See me during my office hours.

Except in extraordinary circumstances, please come to class prepared to remain in attendance for the entire class period. It is not appropriate to come and go from the classroom at leisure during a lecture. If unusual circumstances require you to leave class early, please sit near the door and depart as inconspicuously as possible. Once you have left the classroom, do not return that day.

In general, observe the Scholastic Golden Rule: Do not disturb or distract your fellow students or the instructor. Specifically, do not chit-chat with your neighbours or consume food or beverages. It would also be appreciated if you would not wear headgear that interferes with eye contact.

Laptops, tablets, and phones are to be in use only for class-related purposes, such as notetaking and use of the iClicker Cloud system.

Let good manners, civility, and mutual respect guide your behaviour.

Attendance

If, for whatever reason, you are unable to attend class, you are responsible for making up the missed material as best you can. In doing so, be guided by the *Log of Class Progress*, which provides a brief indication of what was covered and cites the relevant teaching resources. Although, as always, you are welcome to raise specific questions about the course material, neither the instructor nor the grader can provide you with a personal tutorial on the missed material. Similarly, and consistent with the following email policies, any questions about that material should be raised in person during office hours rather than by email.

E-mail Correspondence

My email address is **kstewart@uvic.ca**. This should normally only be used for personal and confidential correspondence, such as to tell me that a health emergency prevents you from submitting an assignment on time.

Email messages are not a useful means of transmitting other types of information, in particular the following.

Questions about course material or assignments are best raised in class or during my office hours. They cannot be answered effectively with email due to, among other things, the unavailability of diagrams and technical notation.

Questions about course administration such as the arrangements governing assignments and exams. These matters are normally discussed in class and that is the best place for asking questions about them, so that other students can benefit from the clarification offered. I do not duplicate by email information that has been related in class or posted to *Brightspace*.

As a rule, I do not reply to "generic" emails; i.e., messages that anyone could have written, as opposed to ones that relate to your individual role in the course. I do not normally respond to email queries about, for example, the content or format of exams, the progress of grading, when final grades are likely to be available, and so on. Remember that instructors are guided by the Golden Rule of Teaching, which is "Do not show favouritism to one student by doing something for them that you would be unwilling to do for the class as a whole." Before sending an instructor an email, ask yourself: Would it be reasonable to expect the instructor to answer the same message from everyone in the class? If not, you are unlikely to receive a reply.

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
- <u>Policy on Human Rights, Equity and Fairness -</u> 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 sypcoordinator@uvic.ca.

Resources for Students

<u>UVic Learn Anywhere</u> - 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.

<u>Centre for Accessible Learning</u> - 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 <u>Centre for Accessible Learning</u> (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.

<u>Centre for Academic Communication</u> - Offers coaching on <u>academic integrity</u>, 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.

<u>Health Services</u> - 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

<u>Counselling Services</u> - Counselling Services can help you make the most of your university experience. They offer free professional, confidential, inclusive support to currently registered UVic students.

<u>Indigenous Student Services</u> - 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 <u>Indigenous counselling services</u> and the <u>Elders in Residence</u>, as well as non-academic programs that may be of interest to you.

<u>International Student Support</u> - The University of Victoria offers a number of resources to support international students as they pursue their studies. UVic's <u>International Centre for Students</u> is the primary office supporting international students on campus at the university-wide level and provides various supportive program through the <u>UVic Global Community Initiative</u>, 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 Liaison 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 <u>CES log-in</u>. 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.