



ECON 501 A01 (CRN 21037)

Macroeconomic Analysis

Winter Session: 2025 01 – CRN 21037, Unit Value 1.5, Contact hours: classes 3.0, labs 1.0. Course schedule: Monday, Thursday, 11:30am–12:50pm, BEC 363. Labs: Wednesday, 9:30am–10:20am, BEC 363. Updated December 13th 2024.

UVic Land Acknowledgement

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

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Course Content

The course covers modern theories of aggregate economic behaviour, the determination of national income and employment, consumption, investment, and growth. The course includes some applications of economic policy problems related to unemployment, aggregate fluctuations, and taxation. One goal of the course is to provide the students with a set of tools useful to study dynamic economies. We will learn a mix of theoretical and applied (quantitative) methods that are going to be instrumental for the analysis of Macroeconomic issues with a modern approach.

The first part of this course discusses general equilibrium theory and introduces students to dynamic models of growth and business cycle fluctuations. The second part turns to the computation of aggregate variables, namely to applied Macroeconomics. To this end, we are going to rely heavily on Dynare (<http://www.dynare.org/>), a software package that allows for an easy specification, numerical solution and (often) estimation of dynamic models.

Although the computers in the departmental lab has recent Dynare versions installed, it is a free software, and students are encouraged to install it on their own computers. Dynare relies on other platforms (typically, Octave or Matlab) to actually perform the computations, so it cannot be used as a stand-alone software. Octave is a free software and it is powerful enough for our purposes. Matlab is a more complete option, but it is also quite expensive. The University offers free student licenses, which will expire once the students are going to complete their MA program.

Learning Outcomes

Students will:

- *Apply critical thinking to interpret aggregate economic phenomena*
- *Acquire mathematical skills useful for the study of dynamic economies*
- *Apply computational and empirical methods to perform a quantitative analysis of macroeconomic outcomes*
- *Analyze complex macroeconomic issues, using realistic models*
- *Provide formal quantitative evaluations of policy reforms*
- *Develop a critical understanding of the recent macroeconomics literature*

Course prerequisites/corequisites

Recommended prerequisites: ECON 500 and ECON 545 (or equivalent advanced undergraduate courses).

Repeating Courses

Faculty of Graduate Studies policies apply.

Textbook

Textbook: There is no single textbook presenting all the course topics in an accessible way. Therefore, there are (portions of) two suggested books. Some of the books listed below are available at the library for digital download. For some parts of the course, I will provide detailed lecture notes.

DD: DeJong, D. and C. Dave, *Structural Macroeconometrics* (2nd edition), Princeton University Press, 2011.

W: Wickens, M., *Macroeconomic Theory* (2nd Edition), Princeton University Press, 2012.

For some topics, the following books are useful further references (the first one is available at the library for digital download):

L: Levendis, J., *Time Series Econometrics. Learning Through Replication*, Springer, 2018.

M: McCandless, G., *The ABCs of RBCs: An Introduction to Dynamic Macroeconomic Models*, Harvard University Press, 2008.

BS: Barro, R. and X. Sala-i-Martin, *Economic Growth* (2nd edition), MIT Press, 2004.

R: Romer, D., *Advanced Macroeconomics* (5th Edition), McGraw Hill, 2019.

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.

Minimum Grade Requirements

Faculty of Graduate Studies policies apply.

Grading

Grading Scheme

The course grade is determined as follows:

Midterms (2): two in-person midterm exams, each worth 25%.

Quantitative Assignment: one long computer-based assignment, submitted and graded, worth 20%.

Final Exam (timed project): 30%.

Practice Exercises: During the term, I will circulate a number of exercises for the students to work on. They are helpful in preparing for the midterm exams, but they will not be graded. Students are encouraged to attempt them, and clarify their doubts during office hours.

Midterms: There will be two in-person midterm exams.

Assignment: It is designed for the students to learn the material in depth, and prepare for the timed project. It will be posted on Brightspace and must be submitted before the relevant deadline. You may discuss with other students how to answer the questions. However, every student must submit their own work, independently written up, and list all people they worked with in the first page. During the term, there will be one computer-based assignment. It will count 20% towards the final grade (if attempted, otherwise students will receive a grade of zero). Note: if caught copying other students' answers, the assignment will receive a grade of zero. The quality of both the codes and the economic interpretation of the numerical results will form the basis for the assignment grades.

Final exam: There will be a final exam, scheduled during the April exam period.

Mandatory/Essential Course Components

Failure to taking the final exam will result in a grade of N regardless of the cumulative percentage on the course. N is a failing grade and factors into GPA as a value of 0.

In order to stay registered in the course, students must attend the lectures scheduled during the first week of the term. To this end, in the first seven days, I might take attendance.

Dates of Assessments, Due Dates of Assignments

Note: it is the student's responsibility to submit quizzes and assignments in a timely fashion. Unless an in-course extension was agreed upon before the relevant deadline, late submissions will not be accepted.

Midterms: The two in-person midterm exams are scheduled on February 10th and March 13th (TBC). More specific details will be given in due time. They are not cumulative, namely the second midterm will only cover the material presented after the first midterm. If you miss a midterm test due to illness or family affliction, please contact me by email. Make-up exams for missed midterms will not be given. In the event that you miss one midterm due to illness or family affliction, the weight of the missed exam will be shifted to the other exams (10% to the other midterm and 15% to the final). The weights of two midterms missed for valid reasons will be shifted to other assessments (20% to the assignment and 30% to the final). Should you miss an exam without approval of the instructor, you will receive a grade of zero for that exam. Note: whenever needed, it is the student's responsibility to provide supporting documentation in a timely manner.

Assignment (tentative) Due Date: March 31st. There may be some changes if necessary.

Final exam: It will be scheduled by the University. It is cumulative, namely it covers the material presented in the whole course. As per university policy, deferred final exams will be given only on the basis of documented illness or family afflictions.

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/quiz 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. Note the automatic academic concession outlined above, such that the weight of a missed midterm for a legitimate reason is shifted to the other components.

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 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.

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

The following list is likely to change. Please ask me in due time for the detailed list of book sections that you are supposed to read.

1) *Economic Dynamics: the Basics*

DD Chapters 1 and 2; W Chapter 2 (No 2.7); BS Chapter 1, M Chapter 1.

2) *Neoclassical Growth Theory*

W Chapters 3 and 4; BS Chapter 2, M Chapter 1.

3) The OLG Growth Model

W Chapter 4.4; BS Appendix to Chapter 3; M Chapter 2.

4) *Endogenous Growth Theory*

W Chapter 3.5; BS Chapter 4.

5) *The Empirics of Economic Growth*

BS Chapters 10 and 12.

6) *The Empirics of Economic Fluctuations*

Lecture notes, DD Chapter 6; Lecture notes; L Chapters 2, 4, 5, 7, 10 and 11.

7) *Numerical Solution of DSGE Models*

Lecture notes, DD Chapter 4; M Chapters 4, 5 and 6.

8) *Calibration and Estimation of DSGE Models*

DD Chapters 11, 12 and 14.

501 Final Exam – it will take place sometime between April 7th-25th 2025.

Important Dates: The last day for adding courses is January 22nd. The last day for withdrawing from courses without penalty of failure is February 28th.

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. Note that it is not uncommon for Uvic's spam filters to block emails sent from non-uvic email accounts.

Electronic Devices

Countless studies unequivocally show that using electronic devices in class is detrimental to student learning. Please refrain from using your phone in class. Taking notes with paper and pencil might prove a useful commitment device to minimize the temptation of social media.

Use of AI

Please be advised that in this course you are not authorized to use any form of generative AI. In order to successfully complete course activities, generative AI is not required nor welcomed. Students should not make any use of generative AI tools such as ChatGPT, Grammarly, among others that use AI for content generation and editing. As the University of Victoria states on its Academic Integrity Policy "Academic integrity requires commitment to the values of honesty, trust, fairness, respect, and responsibility." Therefore, I expect you to comply with the course syllabus and I encourage you to enhance your academic experience in this course by refraining from use generative AI.

Educational Technology involving storage outside Canada

The following educational technologies, which stores or accesses your personal information outside Canada, is required for this course: Zoom. 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 <https://explore.zoom.us/en/privacy/>. 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.