

ECON-710 Advanced Macroeconomics

Faculty of Business and Economics

Winter 2025

1 Instructor Information

• Instructor: Komla Avoumatsodo

• Contact Information: komla.avoumatsodo@unbc.ca, (250) 960-6491, Website

• Office Location & Hours: 10-4558, Wednesday 9:00 am to 11:00 am

2 Course Information

- Lectures: Tuesdays in Room 10-4560 and Thursdays in Room 5-307 from 10:00 am to 11:30 am
- Course Description: This course begins by presenting the differences in income per capita across countries, regions, and over time. It then delves into models that explain long-run economic growth and short-run economic fluctuations. Emphasis is placed on rigorous mathematical treatment of macroeconomic issues, including concepts such as dynamic optimization, recursive representations, and competitive equilibria. These concepts will be applied to classical models of economic growth, business cycle fluctuations, and Schumpeterian paradigm.
- Prerequisites:

3 Course Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Understand and Analyze Income Disparities Across Countries

- Identify the key factors driving income differences between countries.
- Explain the importance of studying economic growth and its implications for development policies.

2. Master the Solow Growth Model

- Derive and interpret the Solow growth model's predictions about steady-state income levels, capital accumulation, and convergence.
- Analyze the effects of policy changes, technological progress, and population growth on long-term economic growth.

3. Apply the Ramsey Model for Intertemporal Optimization

- Construct and solve the Ramsey model to understand optimal savings and consumption decisions over time.
- Examine the role of social preferences, government policies, and technology in shaping economic trajectories.

4. Develop Insights into Real Business Cycle (RBC) Theory

- Explain the microeconomic foundations of RBC models, including their treatment of productivity shocks and intertemporal decision-making.
- Use RBC models to interpret business cycle fluctuations and assess their policy implications.

5. Understand the Schumpeterian Growth Model

- Explore the role of innovation, technological change, and creative destruction in driving economic growth.
- Analyze the interplay between institutions, market structures, and growth dynamics in the Schumpeterian framework.

6. Synthesize and Critically Evaluate Growth Theories

- Compare and contrast the assumptions, mechanisms, and outcomes of various growth models.
- Assess the empirical relevance of theoretical predictions using real-world data.

7. Develop Policy-Oriented Recommendations

• Translate advanced macroeconomic theories into practical policy insights aimed at promoting sustainable economic development.

Critically evaluate the impact of fiscal and monetary policies on growth and stability.

By the end of the course, students will have a robust theoretical foundation in advanced macroeconomics and will be able to apply these tools to analyze complex growth and policy

issues.

Required Text

In this course, textbooks are not mandatory; however, students are encouraged to consult supple-

mentary materials such as "Introduction to Modern Economic Growth" by Daron Acemoglu,

"Advanced Macroeconomics" by David Romer, and "The Economics of Growth" by Phillipe

Aghion and Peter Howitt for deeper insights into the topics covered. All necessary learning ma-

terials, including detailed lecture slides and additional readings in PDF format, will be provided. These materials are designed to comprehensively support the course content, offering clear ex-

planations, theoretical frameworks, and practical examples to enhance student understanding and

engagement.

Evaluation

The final grade in the course will be determined as follows:

• Weekly Quizzes (5% each, 4 quizzes): 20% of total course grade

- The quizzes will consist of questions based on the Assignments.

- Quizzes will be administered at the begining of the class.

- You are responsible for adhering to the due dates and times for each quiz.

- Quizzes cannot be completed outside the due date, time, and place.

• Two Practical Assignments: 20% of total grade

• Midterm Exam: 20% of total course grade

- Due date: Feb. 13, 2025

• Final Exam: 40% of total course grade

- Due date: TBD

3

6 Course Grading

Grade Point	Letter Grade	Percentage	Definition/Standing
4.33	A+	90-100%	Excellent
4.00	A	85-89.9%	
3.67	A-	80-84.9%	
3.33	B+	77-79.9%	Good
3.00	В	73-76.9%	
2.67	B-	70-72.9%	
2.33	C+	67-69.9%	Satisfactory
2.00	C	63-66.9%	
1.67	C-	60-62.9%	Marginal
1.33	D+	57-59.9%	
1.00	D	53-56.9%	
0.67	D-	50-52.9%	
0.00	F	0-49.9%	Failure

7 Course Weekly Schedule

Week	Date	Topic		
1	Jan. 7, 2025	Chap. 1 Introduction		
1	Jan. 9, 2025	Chap. 1 Introduction		
2	Jan. 14, 2025	Chap. 2 Solow Growth Model		
2	Jan. 19, 2025	Chap. 2 Solow Growth Model		
3	Jan. 21, 2025	Chap. 2 Solow Growth Model		
3	Jan. 23, 2025	Quiz 1 & Exercises		
4	Jan. 28, 2025	Chap. 3 Standard Neoclassical Model: Ramsey Optimal Model		
4	Jan. 30, 2025	Chap. 3 Standard Neoclassical Model: Ramsey Optimal Model		
4	Feb. 4, 2025	Exercises		
5	Feb. 6, 2025	Quiz 2 & Chap. 4 Standard Neoclassical Model: Competitive Equilibrium		
6	Feb. 11, 2025	Chap. 4 Standard Neoclassical Model : Competitive Equilibrium		
6	Feb. 13, 2025	Mid-Term Exam		
7	Feb. 18, 2025	No Class		
7	Feb. 20, 2025	No Class		
8	Feb. 25, 2025	Chap. 4 Standard Neoclassical Model : Competitive Equilibrium		
8	Feb. 27, 2025	Chap. 5 RBC Model		
9	Mar. 4, 2025	Quiz 3 & Chap. 5 RBC Model		
9	Mar. 6, 2025	Chap. 6: Endogeneous Growth Model		
10	Mar. 11, 2025	Chap. 6: Endogeneous Growth Model		
10	Mar. 13, 2025	Chap. 6: Endogeneous Growth Model		
11	Mar. 18, 2025	Chap. 6: Endogeneous Growth Model		
11	Mar. 20, 2025	Quiz 4 & Exercises		
12	Mar. 25, 2025	Practical Exercises		
12	Mar. 27, 2025	Practical Exercises		
13	Apr. 1, 2025	Practical Exercises		
13	Apr. 4, 2025	Final Exam Review		

8 Teaching Methodology and Pedagogy

- Lectures will be used to introduce and explain core concepts, theories, and analytical tools.
- Case studies will be employed to provide practical examples and to illustrate the application of theoretical models in real-world scenarios.
- Problem sets will help reinforce the material covered in lectures and develop technical skills in macroeconomics.
- The final exam will assess students' understanding of the material covered throughout the course.

9 University Policies and Ressources

Plagiarism

Plagiarism means representing someone else's work as your own. It is a serious offence, punishable by academic sanctions. When you incorporate the words, ideas, graphics, or other products from someone else's work into your projects, you must give credit by providing a citation and reference to the source work. It is your responsibility to:

- understand what plagiarism is;
- be familiar with and understand the information on plagiarism provided by the Academic Success Centre at their website: http://www.unbc.ca/academic-success-centre/handouts;
- be familiar with the UNBC policy on Student Conduct, and on plagiarism and other academic offences, as described in the UNBC Undergraduate/Graduate Calendar.

Reach Out for Success

University students often encounter setbacks from time to time that can impact academic performance. If you encounter difficulties and need assistance, it's important to reach out. The following resources are available free to all students at UNBC and can help address mental, emotional, or physical health concerns:

UNBC Wellness Centre

- Phone Number: 250 960 6369 Hours: 9am-4pm, Monday-Friday
- Offers counseling for all students as well as access to First Nations Counseling Services
- Provides health and general services that support the academic success and personal wellbeing of students

Counselling Services: https://www2.unbc.ca/counselling

Crisis Centre for Northern BC (available 24 hours a day)

• Phone Number: 250-563-1214 Toll-free: 1-888-562-1214

• Provides confidential services

If you are feeling overwhelmed, depressed, confused, suicidal, or just need someone to lis-

ten, the crisis line provides emotional support, suicide intervention, and referral information.

If you are unable to meet course expectations due to mental health reasons, please discuss your

situation with your instructor, Wellness counsellor, or an academic advisor.

The Academic Success Centre

The Academic Success Centre provides students with **FREE** access to academic support services:

• Tutoring (by appointment, asynchronous online, or drop-in)

• Personalized study skills assessments

• Peer-led course supports

ASC services are available in person at the Prince George Campus and online. Let the ASC know

your preference for online or in-person when you book the appointment.

Room 5-139G, Learning Commons

Email: asc@unbc.ca

Phone: 250-960-6367 **Toll-free:** 1-888-440-3440

The Access Resource Centre (ARC)

The Access Resource Centre (ARC) provides services to students with documented health condi-

tions and/or disabilities. The conditions can range from temporary to permanent and include but

are not limited to:

• Chronic health issues (e.g., Crohn's, Diabetes, HIV, Lupus)

• Hearing and visual impairments

• Learning disabilities

• Mental health challenges (e.g., anxiety disorder, borderline personality disorder, depression

disorder)

• Neurological disabilities (e.g., ADHD/ADD, Autism Spectrum Disorder, Epilepsy, Concus-

sion, Migraines, Multiple Sclerosis)

6

• Mobility and other physical disabilities.

ARC staff are available, by appointment, to meet with you to determine which academic accommodations can be put in place to support you in achieving your academic goals, provide referrals, and help advocate for you. Students who may have a need for academic accommodation are encouraged to contact ARC:

• Email: arc@unbc.ca

• Phone: 250-960-5682 Toll-free: 1-888-960-5682

• Stop by Room 5-157

More details are available at the Access Resource Centre website: https://www2.unbc.ca/access-resource-centre

UNBC Athletics

Please note that students involved in University Athletics will be required to notify the instructor at least two weeks in advance of any official athletics commitments (e.g., games, travel) that conflict with due dates.

General IT Support

Email: support@unbc.ca

Website: https://www2.unbc.ca/information-technology-services/support-students

This group can help you with your password to UNBC and access your accounts.

Moodle Support

For login or ID/password related issues at http://moodle.unbc.ca, contact IT Support at support@unbc.ca

If you have specific questions or errors while uploading assignments, using video/Kaltura, or other issues, contact the Centre for Teaching Learning & Technology:: ctlt@unbc.ca

Food Bank/Good Food Box

You cannot learn if you are hungry. If you need food, go to the NUGGS office and satellite sites on campus. This is part of the PG foodbank as well: https://www.sapg.ca/services/food-bank.

If you have extra items, please donate to the foodbank.

Good Food Box: This is a monthly fresh food box you can sign up for. You may want to split it with a friend. Watch for announcements and the sign-up table in the Wintergarden.