Course Description: This is a Ph.D. level macroeconomic theory course. The course covers growth models, micro-foundations for macroeconomics, and business cycle models. The course also covers basic programming using MATLAB, a software that is commonly used in macroeconomic research.

Prerequisite(s): ECON 5021 (or equivalent) and ECON 6019

Required Textbook: This course does not have a required textbook, but the following books are good references:

cuLearn: This course will make use of CULearn. I will post materials including lecture slides, additional reading assignments, and answer keys to the problem sets. I will also use CUlearn to send announcements to the class as needed. Please make sure that you are set up on CUlearn prior to the course start date. For assistance with cuLearn contact the ITS Service Desk (4th Floor, MacOdrum Library, telephone: 613-520-3700.

Computer Program: This course requires programming with MATLAB. MATLAB is available under the university-wide license.

Course Outline (Tentative)

I. Growth theories
   • Solow model
   • Continuous time optimization
   • Ramsey model
• Overlapping generations model (time permitting)

II. Micro-foundations for macroeconomics
• Discrete time optimization
• Consumption
  o PIH/RW, Asset pricing, risk premium puzzle
• Investment
  o Q-theory, adjustment cost

III. Busyness cycle models
• (Representative-agent) Real business cycle models
• Heterogeneous agent models

Student Evaluation & Course Grades: Each student’s grade shall be calculated as follows:

• 4 Problem sets : 20%
• Midterm : 40%
• Final : 40%

Problem Sets: There will be four problem sets. The problem sets are due at the beginning of the class on the following days:

• Problem set 1: January 30
• Problem set 2: February 13
• Problem set 3: March 13
• Problem set 4: April 3

Midterm exam:
There will be one mid-term exam on February 27 (in class).
Students who can document a compelling reason for missing the midterm exam will be excused and the weight of the midterm will be automatically added to the final exam. There will be no deferred midterm exam.

Final exam:
The final exam will take place during the Winter term examination period at a time and place set by the University. The final exam covers the materials taught after the Midterm.

Re-grading: Any request for the remarking of exams must be submitted in writing within two weeks of that exam first being returned to the class. The request should contain a detailed explanation of why you feel you should receive a higher mark. Please note that remarking will apply to the entire exam not just the contentious question. As a result, the revised mark may be higher than, lower than or the same as the original mark.
Exams or problem sets completed in pencil or erasable ink will not be regraded.
NOTE:
For verification and security purposes, I will not reply to emails originating from non-Carleton e-mail accounts, and which are not signed with a student’s name and student number. Assignments and changes to schedules will be made available on cuLearn only. Please ensure that you have a Carleton email account.

Departmental Drop Box Use:  The Dropbox, where your assignment may be inserted through a brass mail slot in the door of room C-876 Loeb into a secure locked box is only to be used for the submission of late assignments. Please make sure you email your TA and instructor if you have placed an assignment in the Dropbox.

Plagiarism:
Please be aware that plagiarism is serious offense at Carleton and should be recognized and avoided. For further information on how to do so, please see “Pammett on Plagiarism and Paraphrasing” at www.carleton.ca/economics/courses/writing-preliminaries.

Requests for Academic Accommodation:
You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

Pregnancy obligation
Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Religious obligation
Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Academic Accommodations for Students with Disabilities
If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. carleton.ca/pmc
Survivors of Sexual Violence
As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and is survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support

Accommodation for Student Activities
Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf

For more information on academic accommodation, please contact the departmental administrator or visit: students.carleton.ca/course-outline
Reading List:
(Ones with underline should be the most helpful for this course.)

- Solow Model
  - BS, Chapter 1, Section 1 and 2.
  - ROMER, Chapter 1.
  - ACE, Chapter 2.

- Continuous Time Optimization
  - ACE, Chapter 7, Section 1-5.

- Ramsey Model
  - BS, Chapter 2, Section 1 – 6.
  - ROMER, Chapter 2, Part A.
  - ACE, Chapter 8, Section 1-9.

- Overlapping Generations Model
  - ACE, Chapter 9, Section 1-9.

- Discrete Time Optimization
  - LS, Chapter 3 and 4.

- Consumption
  - ROMER, Chapter 8.
• Investment
  o ROMER, Chapter 9.

• Real Business Cycle Models
  o ROMER, Chapter 5.

• Heterogeneous Agent Models
  o LS, Chapter 16 and 17.


