COURSE OUTLINE

E-mail: riccardo.magnani@univ-paris13.fr

Any questions sent by email should receive a response within two business days or during the following class if taken place within the 48 hours following receipt of the email. Note that the professor reserves the right not to answer an email if the level of language used is inadequate.

OFFICIAL COURSE DESCRIPTION

The course introduces advanced techniques and topics in macroeconomic theory (economic growth, consumption, investment, real and nominal frictions in the goods, labour, and credit markets, models of short-run economic fluctuations, and monetary and fiscal policy design) at a master’s level.

The course is organized in two parts.
Part I of the course focuses on economic growth and cross-country differences in economic performance. The course presents major growth theories, from the neoclassical paradigm to the models of endogenous growth. The growth theories are formalized and analyzed rigorously using advanced mathematical techniques. The course emphasizes empirical implications of theoretical models, and discusses the relation of theory to data and evidence.

Part II of the course focuses on dynamic stochastic modeling. The emphasis is placed on modern theories of business cycles, nominal and real rigidities, consumption and asset pricing.

GENERAL COURSE OBJECTIVES

Part I:
• To identify the key factors explaining economic growth and cross-country differences in the economic performance.
• To evaluate the relative importance of these factors using growth models and empirical analysis.
• To apply mathematical techniques of constrained optimization in continuous time to solve and analyze dynamic equilibrium growth models.
Part II:
• To examine rigorously determinants of business cycles, consumption and asset prices.
• To evaluate the relative empirical importance of different factors in explaining business cycles, using dynamic stochastic general equilibrium models.
• To develop analytical skills for solving dynamic equilibrium models in discrete time

SPECIFIC COURSE OBJECTIVES

Part I
By the end of the course, students should be able to:
• Master the techniques of solving growth models in continuous time
• Analyze the equilibrium properties of a growth model.
• Evaluate the strengths and weaknesses of a growth theory in explaining the main growth facts.
• Examine the role of government policies in growth models.

Part II
By the end of the course, students should be able to:
• Explain the key insights from theoretical models examined in the course;
• Evaluate the strengths and the weaknesses of theoretical models examined in the course;
• Derive implications of dynamic models for policy and welfare analysis;
• Specify and solve macroeconomic models using methods of constrained optimization in discrete time, with and without uncertainty;
• Analyze academic articles related to theories of consumption, asset pricing and business cycles.

TEACHING METHODS

The course is taught in a lecture style format.

ASSESSMENT METHODS

Assignments will test the student ability to work with macroeconomic models, understand connections between economic theory and data, and derive policy implications. The evaluations are described in the table below.

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<th>Components of Final Mark</th>
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<td>Evaluation format</td>
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<tr>
<td>Midterm exam</td>
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<td>Final exam</td>
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Policy on language quality and late submissions

Class attendance is necessary to successfully complete this course.

You will also be judged on your writing abilities. It is recommended to take the appropriate measures to avoid mistakes such as spelling, syntax, punctuation, inappropriate use of terms, etc. You may be penalized up to 15%, to the professor’s discretion.

Late submissions are not tolerated. Exceptions are made only for illness or other serious situations deemed as such by the professor. There will be a penalty for late submissions. University regulations require all absences from exams and all late submissions due to illness to be supported by a medical certificate.

Absence for any other serious reason must be justified in writing, to the academic assistants of the Faculty, within five business days following the date of the exam or submission of an assignment. The Faculty reserves the right to accept or refuse the reason. Reasons such as travel, jobs, or any misreading of the examination timetable are not acceptable.

For your information: use as needed

A penalty of 5% will be given for each subsequent day following the due date (weekends not included). This goes for assignments submitted through e-mail as well, and, in this case, the time that the e-mail was received will be counted as the time of submission of the document.

We suggest that you advise your professor as early as possible if a religious holiday or a religious event will force you to be absent during an evaluation.

The University of Ottawa does not tolerate any form of sexual violence. Sexual violence refers to any act of a sexual nature committed without consent, such as rape, sexual harassment or online harassment. The University, as well as student and employee associations, offers a full range of resources and services allowing members of our community to receive information and confidential assistance and providing for a procedure to report an incident or make a complaint. For more information, visit www.uOttawa.ca/sexual-violence-support-and-prevention
SCHEDULE

COURSE OUTLINE

Part I

1. The Solow growth model (Romer, Ch 1).
3. The Ramsey growth model (Romer, Ch 2, sections 2.1-2.7).
4. The Diamond OLG model (Romer, Ch 2, sections 2.8-2.12).
5. Endogenous growth models (Romer, Ch 3, sections 3.1-3.3). If time permits

Part II

6. Real-Business-Cycle models (Romer, Ch 5).
7. Model with nominal rigidities (Romer, Ch 6).
8. Dynamic Stochastic General Equilibrium (DSGE) models (Romer, Ch 7).
9. Consumption (Romer, Ch 8).
10. Investment (Romer, Ch 9). If time permits

BIBLIOGRAPHY

The required textbook is David Romer (2012) Advanced Macroeconomics, 4th edition. The textbook is available at the University of Ottawa bookstore. The relevant chapters from Romer (2012) are included with the list of topics below. Additional required and supplementary readings will be posted on the Blackboard Learn.

Resources for you

FACULTY MENTORING CENTRE - http://socialsciences.uottawa.ca/mentoring

The goal of the Mentoring Centre is to help students with their academic and social well-being during their time at the University of Ottawa. Regardless of where a student stands academically, or how far along they are in completing their degree, the Mentoring Centre is there to help students continue on their path to success.

A student may choose to visit the Mentoring Centre for very different reasons. Younger students may wish to talk to their older peers to gain insight into programs and services offered by the University, while older student may simply want to brush up on study and time management skills or learn about programs and services for students nearing the end of their degree.

In all, the Mentoring Centre offers a place for students to talk about concerns and problems that they might have in any facet of their lives. While students are able to voice their concerns and problems without fear of judgment, mentors can garner further insight in issues unique to students and find a more practical solution to better improve the services that the Faculty of Social Sciences offers, as well as the services offered by the University of Ottawa.
ACADEMIC WRITING HELP CENTRE - http://www.sass.uottawa.ca/writing/

At the AWHC you will learn how to identify, correct and ultimately avoid errors in your writing and become an autonomous writer. In working with our Writing Advisors, you will be able to acquire the abilities, strategies and writing tools that will enable you to:

- Master the written language of your choice
- Expand your critical thinking abilities
- Develop your argumentation skills
- Learn what the expectations are for academic writing

COUNSELLING SERVICE - http://sass.uottawa.ca/en/personal

There are many reasons to take advantage of the Counselling Service. We offer:

- Personal counselling
- Career counselling
- Study skills counselling

HUMAN RIGHTS OFFICE - https://www.uottawa.ca/respect/en

Mandate:
To provide leadership in the creation, implementation and evaluation of policies, procedures and practices on diversity, inclusion, equity, accessibility and the prevention of harassment and discrimination.

Contact information:
1 Stewart St. (Main Floor – Room 121) - Tel.: 613-562-5222 / Email: respect@uOttawa.ca

ACCESS SERVICE - http://sass.uottawa.ca/en/access

The University has always strived to meet the needs of individuals with learning disabilities or with other temporary or permanent functional disabilities (hearing/visual impairments, sustained health issues, mental health problems), and the campus community works collaboratively so that you can develop and maintain your autonomy, as well as reach your full potential throughout your studies. You can call on a wide range of services and resources, all provided with expertise, professionalism and confidentiality.

If barriers are preventing you from integrating into university life and you need adaptive measures to progress (physical setting, arrangements for exams, learning strategies, etc.), contact the Access Service right away:

- in person at the University Centre, Room 339
- online
- by phone at 613-562-5976

**Deadlines for submitting requests for adaptive measures during exams**

- midterms, tests, deferred exams: seven business days before the exam, test or other written evaluation (excluding the day of the exam itself)
- final exams:
  - November 15 for the fall session
  - March 15 for the winter session
  - Seven business days before the date of the exam for the spring/summer session (excluding the day of the exam itself).
Career Development Centre - http://www.sass.uottawa.ca/careers/

Career Development Centre offers various services and resources in career development to enable you to recognize and enhance the employability skills you need in today’s world of work.


The Student Resources Centres aim to fulfill all sorts of student needs.

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**Beware of Academic Fraud!**

Academic fraud is an act committed by a student to distort the marking of assignments, tests, examinations, and other forms of academic evaluation. Academic fraud is neither accepted nor tolerated by the University. Anyone found guilty of academic fraud is liable to severe academic sanctions.

Here are a few examples of academic fraud:

- engaging in any form of plagiarism or cheating;
- presenting falsified research data;
- handing in an assignment that was not authored, in whole or in part, by the student;
- submitting the same assignment in more than one course, without the written consent of the professors concerned.

In recent years, the development of the Internet has made it much easier to identify academic plagiarism. The tools available to your professors allow them to trace the exact origin of a text on the Web, using just a few words.

In cases where students are unsure whether they are at fault, it is their responsibility to consult the “Writing and Style Guide for University Papers and Assignments.” It can be found at: http://socialsciences.uottawa.ca/undergraduate/writing-style-guide

Persons who have committed or attempted to commit (or have been accomplices to) academic fraud will be penalized. Here are some examples of the academic sanctions, which can be imposed:

- a grade of “F” for the assignment or course in question;
- an additional program requirement of between 3 and 30 credits;
- suspension or expulsion from the Faculty.

For more information, refer to the Student’s Guide to Academic Integrity: http://www.uottawa.ca/vice-president-academic/sites/www.uottawa.ca.vice-president-academic/files/academic-integrity-students-guide.pdf

and Academic Integrity Website (Office of the Vice-President Academic and Provost) http://web5.uottawa.ca/mcs-smc/academicintegrity/home.php