University of Waterloo Department of Economics ECON 402-001 Macroeconomic Theory 3 Spring 2018

2:30-3:50pm Tuesday, Thursday PAS 1241

Instructor: Kate Rybczynski **Office:** 242 Hagey Hall

Office Hours: 1:00-2:00 pm, Tuesday, Thursday, or by appointment

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(This web page is password protected, attend the first class, check learn, or e-mail me for the password)

Course Description:

This course introduces students to advanced macroeconomic tools used for analysis of economic dynamics. Emphasis is placed on modeling the individual decision making that underlies aggregate behaviour in a dynamic framework. The models covered in this course are used to analyze economic growth, unemployment, inflation, consumption and savings. Empirical techniques used to test the predictions of the models are discussed.

A high level of mathematical and quantitative analysis is required in this course. Students weak in math are advised to brush up on calculus, linear algebra and statistics PRIOR to the start of the term.

Course Goals and Learning Outcomes

ECON 402 provides an overview of several economic models (e.g. basic Solow-Swan, Overlapping Generations, Real Business Cycle, Search and Matching models, as well as extensions of these models). Students will learn to work with these models, and to understand the scope and limitations of these models in analyzing real world problems in growth, business cycles and labour markets.

Upon completion of this course, students should be able to:

- Classify economic models into broad categories (e.g. state dependency: deterministic vs stochastic).
- Evaluate the strengths and weaknesses of a model across multiple criteria (e.g. realism, accuracy).
- Solve analytical problems using a variety of economic models.
- Use these models to predict the effects of shocks on economic outcomes.

Required Text:

• Advanced Macroeconomics, 4rd Edition, by David Romer.

Although the latest edition is at the bookstore, if you wish to purchase the 2^{nd} or 3^{rd} edition used, it covers the core material almost as well. The 2^{nd} Edition text is on reserve at Dana Porter Library.

Resources Available On Line:

- Lecture slides
- Announcements
- Study Questions
- LEARN password for course website & communication

Course Requirements and Assessment:

| Assessment | Date & Location | Weighting |
|-------------|------------------|-----------|
| Term Test 1 | June 5, in class | 25% |
| Term Test 2 | July 5, in class | 25% |
| Final Exam | TBD | 50% |
| Total | | 100% |

Course Outline:

| Week | Topic | Readings |
|-------|---|----------------------|
| 1 | Introduction -common questions -model classification & evaluation -basic tools and methods | Lecture slides |
| 2-5 | Growth -representative agent -endogenous growth -convergence -overlapping generations (OLG) | Chapters 1, 4, 3 & 2 |
| 6-9 | Business Cycles -basic facts -real business cycle (RBC) theory -endogenous business cycles | Chapter 5 |
| 10-12 | Unemployment and Labour -efficiency wage -search & matching | Chapter 10 |
| 13 | Review | Notes |

ECON 402 Policies:

Attendance -

• Attending, asking relevant questions, and participating in the class improves understanding of the course material for you and for your classmates.

Missed Term Test -

- The weight of one missed term test will shift automatically to your final exam provided you have written the other term-test. No make-up will be held.
- It is in your best interest to write both term tests because I will also shift the weight of either or both of your term tests to the final exam if you do better on the final exam. Term tests are good practice for the final.

Missed Final Exam Policy -

- A student who misseds the final exam must follow the Economics Department Deferred Final Exam Policy procedures.
- The Deferred Final Exam Policy is found at https://uwaterloo.ca/economics/undergraduate/resources-and-policies/deferred-final-exam-policy
- The deferred exam will be substantially different than that written by the rest of the class.

Territorial Acknowledgement:

We acknowledge that we are living and working on the traditional territory of the Neutral, Anishinaabe and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, the land promised to the Six Nations that includes six miles on each side of the Grand River. Learn more about the Anishinaabe, Haudenosaunee, Six Nations, and territorial acknowledgement.

Accommodation for Students with Disabilities:

Note for students with disabilities - The AccessAbility Services office, located on the first floor of the Needles Hall extension (1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.

Academic Integrity:

Academic Integrity - In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility. See the <u>UWaterloo</u> <u>Academic Integritity</u> webpage and the <u>Arts Academic Integrity</u> webpage for more information.

Discipline - A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline. For typical penalties check Guidelines for the Assessment of Penalties.

Grievance - A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4. When in doubt, please be certain to contact the department's administrative assistant who will provide further assistance.

Appeals - A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 - Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 - Student Appeals.

Cross-listed course:

Please note that a cross-listed course will count in all respective averages no matter under which rubric it has been taken. For example, a PHIL/PSCI cross-list will count in a Philosophy major average, even if the course was taken under the Political Science rubric.

Mental Health Support:

All of us need a support system. The faculty and staff in Arts encourage students to seek out mental health supports if they are needed.

On Campus

- Counselling Services: counselling.services@uwaterloo.ca / 519-888-4567 ext 32655
- MATES: one-to-one peer support program offered by Federation of Students (FEDS) and Counselling Services
- Health Services Emergency service: located across the creek form Student Life Centre

Off campus, 24/7

- Good2Talk: Free confidential help line for post-secondary students. Phone: 1-866-925-5454
- Grand River Hospital: Emergency care for mental health crisis. Phone: 519-749-433 x6880
- Here 24/7: Mental Health and Crisis Service Team. Phone: 1-844-437-3247
- OK2BME: set of support services for lesbian, gay, bisexual, transgender or questioning teens in Waterloo. Phone: 519-884-0000 x 213

Full details can be found online at the Faculty of ARTS <u>website</u>
Download <u>UWaterloo and regional mental health resources (PDF)</u>
Download the <u>WatSafe</u> app to your phone to quickly access mental health support information