## **Syllabus**

# Economics 602 Macroeconomic Theory I Winter 2018

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**Office Hours:** Tuesday, Thursday: 1:30-2:30pm

#### **Meetings:**

This class meets on Tuesday and Thursday from 11:00am-12:50pm in PAS 2086.

#### **Overview:**

<u>Calendar Description:</u> The main purpose of this course is to provide students with the methodological tools that underlie dynamic equilibrium analysis of the macro-economy.

This version of Econ. 602 will develop two of the main, workhorse, models of modern macroeconomic theory: the overlapping generations model, and the infinitely lived representative agent model. The primary focus of the course will be the theoretical underpinnings of these models.

#### **Evaluation:**

There will be a midterm exam worth 30% of the final grade, as well as a final exam worth 50% of the final grade. The midterm will take place in the regular classroom during class time on Thursday, Feb. 15<sup>th</sup>. The final exam will take place during exam week at a time and place chosen by the Registrar's Office.

The remaining 20% of the grade will be based on homework assigned throughout the semester.

## **Policy on Missed Assignments and Tests:**

No make-up tests will be provided. A student who does not have a relevant medical certificate will receive a mark of zero on a missed test and her/his final grade will be computed in accordance with the formula specified above. For students who do have a relevant medical certificate, or medical certificates, the weight from the missed midterm will be applied to the final exam.

## **Textbook & Readings:**

The required textbook for this class is:

Mas-Colell, A., M. Whinston, and J. Green (1995), *Microeconomic Theory*, New York: Oxford University Press.

Note that the textbook will be most useful during the first part of the course, when we are covering the microeconomic theory that underpins modern macroeconomic models. The textbook is intended as a comprehensive reference book for this part of the course. The in class treatment will not mirror that of the text.

I will also be assigning academic papers as readings throughout the semester. Most of the papers are published in journals to which the university library has a subscription. I will provide links to the published versions of the articles via Learn. The links work from on campus computers, and you may also be able to access them from off campus via a <u>proxy server</u> (though this depends on what online rights the library has paid for).

## **Tentative Outline of Topics:**

I have identified textbook chapters corresponding to the topic where this is possible. I will post additional references on Learn for many topics. I will also incorporate applications into several of the sections.

- 1. On the Origins of Mainstream Macroeconomic Theory
- 2. Optimization
  - Consumer Optimization (MWG 3.D)
  - Aggregation (MWG 4)
  - Production (MWG 5)
- 3. General Equilibrium Theory
  - Pure Exchange (MWG 15.B)
  - Production (MWG 15.C)
- 4. General Equilibrium: Welfare
  - The First and Second Welfare Theorems (MWG 16.C and 16.D)
  - The Theorem of the Second Best

- 5. General Equilibrium: Existence, Uniqueness, and Stability (MWG 17)
  - Existence (MWG 17.C)
  - Anything Goes (MWG 17.E)
  - Uniqueness (MWG 17.F)
  - Comparative Statics (MWG 17.G)
  - Stability (MWG 17.H)
- 6. General Equilibrium Under Uncertainty (MWG 19)
- 7. Intertemporal Optimization
- 8. Dynamic General Equilibrium: Overlapping Generations Models
- 9. Dynamic General Equilibrium: Representative Agent Models

## Statements and links that must be included on all course outlines

## Cross-listed course (requirement for all Arts courses)

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.

## **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 Academic Integrity webpage</u> and the <u>Arts Academic Integrity webpage</u> 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 <u>Policy 70 - Student Petitions and Grievances</u>, 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.

## **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.