

# Macroeconomic Theory

## ECON 330D1-002

Chinmay Sharma

September 10, 2017

### 1 Course Objectives

The objective of this course is to make you familiar with the modern day tools and methods of macroeconomics. Macroeconomics is a vast field, and it is not possible to summarize it in its entirety in a single course. It is my hope, however, that by the end of this course, you will be able to:

1. Understand and critically assess macroeconomic policies implemented by policy makers and governments. Such analyses would involve weighing the costs and benefits of policies.
2. *Start thinking like a macroeconomist!* For instance, this would entail going above and beyond a layperson's understanding of economic issues. In economics, there is generally no single right answer. One should generally refrain from making blanket statements.

I have attempted to combine material from a number of sources, and I will strive to make the material as intuitive as possible. We will be going over a variety of models that attempt to simplify reality and distill economic problems to their crucial and quintessential aspects. Models are not to be taken as *literal* representations of the world. They are an abstraction because reality is just too complex to be encapsulated by a single model. For instance, how will consumers react to an increase in the interest rate? To answer this question, we will need to make assumptions about the economy generally, and consumers specifically. One way to think about models is to juxtapose them to maps. In order to learn about distances between countries, we can use a map instead of navigating a ship across high seas. Of course, the appropriateness of models relies on the plausibility of their assumptions. Questioning the assumptions of models and indeed, realizing that they may fail in certain (if not most) real world cases is also a key component to understanding models. We will be making use of distinct models to go over a variety of relevant, and interesting topics. These include, but are not limited to: the theory of output, consumption, investment, employment (and unemployment), economic growth, business cycles, the price level and central banking.

## 2 Lecturer Contact Information

- **Email:** chinmay.sharma@mcgill.ca
- **Office Hours:** *TBD*
- **Location of Office Hours:** Leacock 437

## 3 Textbooks and Material

I will be making use of the book by Stephen D. Williamson, titled *Macroeconomics*. This book will form the core of the lectures. Lectures will be posted before each class, and students will be expected to keep up with the lectures. The subject matter is cumulative in nature- *id est* if you fail to keep up with lectures, you will find that future lectures become increasingly hard to comprehend. I will also be using journal articles to supplement some of the lectures covered in class.

## 4 Class Schedule

2 Classes per week (Wednesdays and Fridays from 2:35 P.M to 3:55 P.M) at ENGTR 0100.

## 5 Grading Policy

### 5.1 Assignments

The grading for this course comprises of two components: 4 homework assignments and 2 final exams. The 4 homework assignments are worth 7.5% each. As such, the homework component will count for 30% of your overall grade. Two of the homework exercises can be done in groups (these will be empirical in nature), and two of them will have to be done individually. Moreover, the group assignments will have to be typed by **separately** by each student. Late assignments will be penalized by 10 marks each day (out of 100), for a maximum of 5 days, after which they will be awarded a mark of 0.

I will be using *mycourses* to post the homework assignments and other class related documents.

### 5.2 Final Exams

There will be two closed book, cumulative final exams during the regular exam periods in December and April. You will be expected to know and understand the material that we will cover in classes. The exam in December will cover approximately half of the material, whereas the one in April will be cumulative. As such, the April exam will contain a lot more testable information. Without loss of generality, assume that the grade for the exam

in December is  $E_1$  whereas the one for April is  $E_2$ . The exam component of the course will be computed as follows:

$$G = \begin{cases} E_2 & \text{if } E_2 - E_1 \geq 10 \\ 0.6 \times \max(E_1, E_2) + 0.4 \times \min(E_1, E_2) & \text{o/w} \end{cases}$$

where the former if condition ensures that a student is able to raise *an entire letter grade or more* on the final, relative to the midterm. If a student meets this condition, then the exam will count for 100% of the grade component. This scheme will *always* weigh the higher grade more, and will reward **significant** improvement handsomely.

### 5.3 Missed Exam

In the eventuality that you miss the final exam due to an illness or extenuating circumstances, you will need to provide a Doctor's note for the former or a proof of the latter **no later than a week after the exam**, in which case you will be allowed to write a supplemental exam.

## 6 Policy Statements

### 6.1 Academic Integrity

McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/) for more information)

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/)).

### 6.2 Language of Submission

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue).

### **6.3 Additional Statements**

Instructor-generated course materials (e.g., handouts, notes, summaries, exam questions, etc.) are protected by law and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. Note that infringements of copyright can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

## 7 (Tentative) Course Plan

Topic	Content
Topic 1	<ul style="list-style-type: none"><li>• GDP and its Measurement</li></ul>
Topic 2	<ul style="list-style-type: none"><li>• Consumer and Firm Behavior: The Work-Leisure Decision and Profit Maximization</li></ul>
Topic 3	<ul style="list-style-type: none"><li>• A Closed-Economy One-Period Macroeconomic Model</li></ul>
Topic 4	<ul style="list-style-type: none"><li>• A Two-Period Model: The Consumption Savings Decision and Credit Markets</li></ul>
Topic 5	<ul style="list-style-type: none"><li>• A Real Intertemporal Model with Investment</li></ul>
Topic 6	<ul style="list-style-type: none"><li>• The Solow Growth Model</li></ul>
Topic 7	<ul style="list-style-type: none"><li>• A Monetary Intertemporal Model</li></ul>
Topic 8	<ul style="list-style-type: none"><li>• Money, Inflation, and Banking</li></ul>
Topic 9	<ul style="list-style-type: none"><li>• Unemployment: Search and Efficiency Wages</li></ul>