

University of Waterloo
Department of Economics

Syllabus
Economics 306
Macroeconomics
Spring 2022

Instructor: Matthew Doyle
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Meetings: This class meets on Mondays and Wednesdays from 1:00-2:20pm in QNC 1502.
Office Hours: Mondays and Wednesdays from 10:30-Noon, in HH 132.

Course description:

This course introduces students to the analysis of inter-temporal trade-offs in macroeconomics. Its main objective is to show how economists use economic theory to analyze the role of incentives and general equilibrium considerations in the macro-economy. The course is intended to lay the theoretical foundations that underpin the upper year courses in Macroeconomics (Econ 406, 407, 408, 409, and 496).

Outline of Topics:

May 2nd and 4th: Introductory classes

May 9th, 11th, and 16th: Consumption and saving
May 18th, 25th, and 30th: Consumption under uncertainty
June 1st: **Midterm 1**

June 6th, 8th, and 13th: Static general equilibrium with production: diagrams
June 15th, 20th, and 22nd: Static general equilibrium with production: calculus
June 27th: **Midterm 2**

June 29th, July 4th, and 6th: Dynamic general equilibrium
July 11th, 13th, and 18th: Government and the macroeconomy
July 20th: **Midterm 3**

July 25th: Overflow class/Makeup midterms

Delivery:

This class will be taught in person. While I will be posting lecture notes, these are intended as a complement to, and not a substitute for, the in-class discussions. The class is expressly *not* designed to be followed remotely. Consequently, you should not take this class unless you are available to come to class regularly.

Textbook:

Since there is no textbook that closely fits the structure of this course, there will be no required textbook for the class. Instead, the main reference for this class will be the class notes that I will post on Learn.

If you would like a textbook reference for the course, the book I recommend is: Williamson, Stephen. Macroeconomics. Any edition will work. This book has chapters on many, but not all, of the topics we will cover in Econ 306. It does a good job with the diagrammatic treatments but relegates the calculus approaches to a mathematical appendix.

Some material (for example, consumption under uncertainty) is not covered by the Williamson book. If you would like a textbook reference for that material, I recommend Romer, David. Advanced Macroeconomics. Be aware that this book is pitched at a slightly higher mathematical level than the course as a whole

Grading:

Assignments: 30%
Midterm 1: 20%
Midterm 2: 20%
Midterm 3: 20%
Final project: 10%

Assessments and due dates:*1. Written assignments:*

I will assign readings for each topic. You will be expected to submit questions/comments about each of the readings prior to the in-class discussions via the dropbox on Learn. The due dates, and associated topics, are posted below—these due dates may be pushed back if needed but will not be moved forward.

Assignment due dates:

- May 5th: Assignment 1 (Consumption and savings)
- May 16th: Assignment 2 (Consumption under uncertainty)
- June 6th: Assignment 3 (Static general equilibrium with production: diagrams)
- June 13th: Assignment 4 (Static general equilibrium with production: calculus)
- June 30th: Assignment 5 (Dynamic general equilibrium)
- July 7th: Assignment 6 (Government and the macroeconomy)

The Learn Dropbox is scheduled to close at 11 pm on each due date. Ideally, you should prepare to submit your assignment prior to the closing of the Dropbox. Note, however, that I am typically still awake at 11pm, so if you are having problems with the Dropbox, you can email me, and we should be able to sort something out.

Note: These assignments are not substitutes for tests and are not intended to evaluate how well you understand the material. Instead, I will use them i) to provide an incentive for you to keep up with the course readings, and ii) to help shape the in-class discussion of each topic. For each assignment you are asked to list any technical/mathematical and conceptual questions you have about the material. Each assignment will be graded on the extent to which it demonstrates that you have read and thought about the assignment content in sufficient detail to have constructive comments and/or questions about it.

2. Midterms:

The midterms will be written tests and will take place in the regular classroom at the regular class times. The first midterm will take place on Wednesday, June 1st, the second midterm will take place on Monday, June 27th, and the third midterm will take place on Wednesday July 20th.

3. Final project:

For the final project, you are asked to formally model an issue in macroeconomics using the tools covered during the semester. I will provide a list of possible choices via Learn. The final project is to be submitted, via the Learn Dropbox, at 11pm on July 25th.

Policy on Missed Exams and Assignments:

1. Written assignments:

Since I need the assignments to structure class discussion, I will not accept late assignment submissions. In terms of grading, I will drop the lowest assignment and calculate your grade as the average of the remaining assignments. This will be done automatically. That means that you do not have to submit medical documentation or self-declare an illness if you miss one assignment.

If you miss two assignments, you must supply documentation for each missed assignment in order to not receive a grade of zero on the missed assignments. In this case, your grade will be calculated as the average of the remaining assignments.

Note that completion of the assignments prior to the in-class discussion is a central component of the course design. If it turns out that you are unable to complete 3 or more of the assignments, the appropriate accommodation will be to take a grade of WD in the course and to re-take it in another semester when you will be better able to complete the course work.

2. Midterms:

A student who misses a midterm for acceptable medical or personal reasons should seek approval from me to write a make-up midterm. To obtain approval, a student must provide appropriate documentation, such as the University's Verification of Illness Form completed by their physician in the case of medical issues. Documentation must be provided within 10 calendar days of the missed midterm. The default is that a makeup midterm will take place in person during class time on the last day of scheduled classes (i.e. July 25th). The makeup midterm will be of the same format as the regular midterms and will cover topics from the missed midterm.

A student who missed both midterms for acceptable medical or personal reasons should seek approval from the Economics department to write a deferred final exam. Information about the department's procedures for deferred exams can be found at the following link:

[Deferred final exam policy | Economics | University of Waterloo \(uwaterloo.ca\)](#)

Typically, the department schedules deferred exams for the last day of the final exam period (I believe that this is Saturday August 13th, this term). A deferred final exam will cover topics from both missed midterms.

Contingency Plans

1. In the event of a *short-term cancellation* of in person classes, the structure of the course will not change. We will simply convert the in-person classes to virtual classes. In the event that a short-term cancellation of classes covers one of the midterm dates, the relevant midterm will be rescheduled to the *second* class period after in person meetings resume.

2. In the event of a *long-term cancellation* of classes, the structure of the course will necessarily change. First, rather than attempting to replicate in class discussions online, I will substitute in class meetings with pre-recorded video lectures. Any remaining midterm exams will be cancelled (since in person exams will no longer be possible). Furthermore, any remaining reading assignments will be converted into traditional assignments (i.e. where I ask questions about the material and you submit written answers). This will necessitate a change in the due dates. I will post new due dates, but these will typically be 7 days after the end of each topic. For example, since the topic "Static General Equilibrium with Production: Diagrams" is scheduled for discussion on June 6th, 8th and 13th, the assignment for this topic would be due on July 20th.

The final project, which is to be submitted via dropbox anyway, will remain unchanged as will the final project's weight of 10% in the grading scheme.

Note that the cancellation of in person midterms and shift from reading to traditional assignment will require a re-weighting of the grading scheme. This will occur as follows: the weight for any completed midterms will remain the same, and the weight on any completed reading assignments will be proportional to the number that have been completed. The weight on any cancelled midterms and uncompleted reading assignments will be transferred to the new assignments.

Let's see how this works using an example. Suppose that we are told on June 28th that in person classes will be cancelled for the remainder of the semester. First, the final project will be unaffected. Second, the first two midterms will have been written, so those too will be unaffected. Third, four of the six reading assignments will have been written. Since that is $\frac{2}{3}$ of the reading assignments, the completed assignments will be weighted at 20% of the final course grade (since 20% is $\frac{2}{3}$ of 30%, and the reading assignments are worth 20% of the course grade under the original grading scheme). This leaves 30% of the course grade (the 10% for the remaining assignments, and 20% for midterm 3, which would not be written under this scenario). That 30% would be divided equally across two traditional assignments (one for each of the remaining topics), which would be due via Learn on July 13th, and July 25th.

For students who miss a midterm prior to in person classes being cancelled, any makeup midterm will be written in person to the extent that this is feasible (i.e. if in person meetings are expected to resume prior to the end of the exam period). If not, the makeup midterm will be administered remotely.

Institutional-required statements for undergraduate course outlines approved by Senate Undergraduate Council, June 15, 2009 (updated June 2021)

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 [Office of Academic Integrity webpage](#) for more information.

Discipline

A student is expected to know what constitutes academic integrity to avoid committing an academic offence and to take responsibility for his/her actions. Check [the Office of Academic Integrity](#) for more information. 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 their 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](#).

Note for Students with Disabilities

[AccessAbility Services](#), located in Needles Hall, Room 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 AccessAbility Services at the beginning of each academic term.