ECON642 — Topics in Applied Macroeconomics

Master of Science in Applied Economics
University of Maryland, College Park
Syllabus — Fall 2021

Instructor: Scott W. Ohlmacher  
sohlmac@umd.edu

TA: Wantian Huang  
whuang11@umd.edu

Office Hours: Thursdays, 5:30-6:30 PM  
Sundays, 4:00-4:45 PM (Online)
(Online)  
Thursdays, 5:15-6:15  
(Morrill Hall 1106A)

or by appointment

Class Meeting: Mondays, 6:30 PM-9:15 PM  
0111 Tydings Hall
15-minute break at 8:00 PM

Website: https://www.elms.umd.edu

Overview
This course covers macroeconomic analysis as applied to public policy. The course focuses on development and understanding of several canonical models of the macroeconomy. These models form the basic structure that underlies macroeconomic analysis in professional and public policy settings. Our goal for the course is to develop a deep understanding of this framework and to evaluate how the models can be extended to address policy-relevant questions.

Some of the models covered in this course may be familiar to students who have taken an undergraduate course in intermediate macroeconomics. The course does not assume any prior knowledge of these models, but will cover them at a pace and in a level of detail consistent with a professional master’s degree program. Extensive use of differential calculus will be required.

Safety and COVID-19 Precautions
The University of Maryland has provided the following guidance regarding COVID-19 vaccination and masking at the College Park campus:
• **Vaccination:** COVID-19 vaccinations are required for all students, faculty and staff returning to campus for fall 2021 semester.

• **UMD Mask Mandate:** UMD policy requires face coverings over the nose and mouth, while you are indoors in UMD facilities. There are no exceptions. Students not wearing a mask will be asked to wear one. If necessary, we can provide a mask to students who have lost or forgotten theirs. Students who refuse to wear a mask will be asked to leave the classroom. Students who have additional issues with the mask requirement after an initial warning will be referred to the UMD Office of Student Conduct.

Furthermore, the University of Maryland has provided the following guidance regarding when students should avoid coming to campus:

Do not come to campus if: you are experiencing any COVID-19 symptoms, you are caring for someone with COVID-19 or possibly has COVID-19, you are waiting for results of a COVID-19 test because you had symptoms or were exposed or if you are sick in any way, even with mild illness. Do not come to campus, even to be tested at a testing event, if you have symptoms or have been exposed to someone who has COVID. Call the Health Center’s HEAL line at 301-405-HEAL for guidance.

I will accommodate students who are unable to come to campus to the fullest extent possible. Please err on the side of caution.

To maximize flexibility, office hours will be conducted online and most assignments will be submitted online.

**Course Structure**
Lectures will be conducted weekly and in-person as conditions allow. Lectures will typically cover several topics. Students will be expected to have completed any relevant reading prior to attending lecture.

On weeks when students present research papers in class, students will also be required to participate in online discussions about the presentations.

**Prerequisite**
Admission to the University of Maryland’s Master’s of Science in Applied Economics Program.
Required Text and Reading Materials
The textbook required for this course is:


Note that this textbook is a work-in-progress and is available as a free download.

Other reading materials, including recommended academic empirical macroeconomics papers for use in presentations, will be posted to the course webpage periodically.

Course Objectives
The Master’s of Science in Applied Economics at the University of Maryland lists the following general objectives for the program:

1. **Ability to understand, evaluate, and analyze economic data**
2. Ability to understand and interpret statistical evidence from economic data
3. **Ability to apply empirical evidence to assessing economic arguments**
4. **Ability to apply macroeconomic theories to policy discussions**
5. Ability to apply microeconomic theories to policy discussions
6. **Ability to communicate economic ideas to a broader audience**
7. Ability to evaluate the effectiveness of policy programs using sound economic techniques

This course focuses developing skills related to objectives 1, 3, 4, and 6.

Grading and Assignments
Final grades will be computed as a weighted average of students’ scores on problem sets, a midterm exam, a final exam (not cumulative), a group presentation, and online course discussion. Details of these assignments are discussed in subsequent sections. The following assignment weights will be used to compute the final grade:

- **Problem Sets** 20%
- **Midterm Exam** 25%
- **Final Exam** 30%
- **Group Presentation** 15%
- **Online Discussion** 10%

**Total:** 100%
Numerical final grades will be assigned letter grades using the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>0-9</td>
</tr>
<tr>
<td>D</td>
<td>10-19</td>
</tr>
<tr>
<td>D+</td>
<td>20-29</td>
</tr>
<tr>
<td>C-</td>
<td>30-39</td>
</tr>
<tr>
<td>C</td>
<td>40-49</td>
</tr>
<tr>
<td>C+</td>
<td>50-59</td>
</tr>
<tr>
<td>B-</td>
<td>60-69</td>
</tr>
<tr>
<td>B</td>
<td>70-79</td>
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<tr>
<td>B+</td>
<td>80-89</td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
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<tr>
<td>A</td>
<td>93-100</td>
</tr>
</tbody>
</table>

**Problem Sets**
There will be a total of twelve problem sets for the course. Problem sets will be posted to ELMS on Tuesday each week. Problem sets will consist of applications of material already covered in lectures and some leading content to motivate the upcoming lecture and discussion. Students will have one week to complete the problem sets, which must be submitted via the course webpage by 11:59 PM the Monday after the assignment is posted. Students are encouraged to discuss problem sets, but each student must turn in individual work for all assignments.

**Midterm and Final Exams**
There will be two exams in this course. The midterm exam will be held starting at 6:30 PM on Monday, October 25th, and will cover all material from lectures prior to that date. The final exam will be held starting at 6:30 PM on Monday, December 13, and will only explicitly cover content from lectures held after the midterm exam. Students will have two hours to complete each exam.

**Group Presentation**
Groups of 2-3 students will give short presentations (about 20 minutes in length) summarizing and analyzing a recent applied macroeconomics research paper. A list of appropriate papers will be provided on the course webpage, but students are welcome to propose papers that are not on the provided list. Topics must be submitted for approval by September 13. Starting September 27, we will have one presentation per week during the scheduled class meeting time. Draft presentations should be submitted for review no later than 11:59 PM the Thursday before the final presentation is due.

**Online Discussion**
We will hold weekly online discussions about the student presentations. Any week that we have in-class presentations, students must submit a potential topic or question related to one of the presentations for the weekly discussion by 11:59 PM on Tuesdays. New discussion topics will be posted each week by 10:00 PM on Wednesdays. By 11:59 PM on Saturdays, each student will have commented on one
and only one open discussion thread. Students will be exempt for submitting topics on the week that their presentations are due, but each presentation group will be responsible for providing initial responses to topics related to their presentations no later than 11:59 PM EDT on Thursday. Students will be graded on the quality of their submissions and responses.

**Example Weekly Schedule**
Below is an example of the schedule of due dates for a typical week in this course. This schedule may not be representative of every week, particularly weeks with exams or other extenuating circumstances.

<table>
<thead>
<tr>
<th>DAY OF WEEK</th>
<th>TYPICAL SCHEDULE</th>
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</thead>
</table>
| MONDAY      | 6:30-9:15 PM: Lecture and student presentations  
11:59 PM: Problem set due |
| TUESDAY     | 12:00 AM: New problem set posted  
11:59 PM: Suggestions and questions for new discussion topics due |
| WEDNESDAY   | 10:00 PM: New discussion topics posted |
| THURSDAY    | 5:30-6:30 PM: Instructor’s office hours  
11:59 PM: Draft of presentations for the following week due  
11:59 PM: Presenting students’ responses to discussion topics due |
| FRIDAY      |                  |
| SATURDAY    | 11:59 PM: All other responses to discussion topics due |
| SUNDAY      |                  |

**Schedule**
Below is a tentative schedule of topics and associated textbook readings, as well as the dates of exams and problem set due dates.

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATE</th>
<th>TOPIC</th>
<th>READING</th>
<th>DUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8/30</td>
<td>Introduction &amp; Measuring the Macroeconomy, Mathematical Refresher</td>
<td>Chapters 1-3, Appendix A</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>9/6</td>
<td>Labor Day - No Class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEEK</td>
<td>DATE</td>
<td>TOPIC</td>
<td>READING</td>
<td>DUE</td>
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<tr>
<td>3</td>
<td>9/13</td>
<td>The Economy in the Long Run: The Solow Growth Model, Part I</td>
<td>Chapters 4 and 5</td>
<td>Problem Set 1</td>
</tr>
<tr>
<td>4</td>
<td>9/20</td>
<td>The Economy in the Long Run: The Solow Growth Model, Part II</td>
<td>Chapters 6 and 7</td>
<td>Problem Set 2</td>
</tr>
<tr>
<td>5</td>
<td>9/27</td>
<td>The Economy in the Long Run: The Overlapping Generations Model</td>
<td>Chapter 8</td>
<td>Problem Set 3</td>
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<tr>
<td></td>
<td></td>
<td>Student Presentations Begin</td>
<td></td>
<td></td>
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<tr>
<td>6</td>
<td>10/4</td>
<td>The Economy in the Medium Run: The Neoclassical Model</td>
<td>Chapter 18</td>
<td>Problem Set 4</td>
</tr>
<tr>
<td>7</td>
<td>10/11</td>
<td>The Economy in the Medium Run: The Neoclassical Model, Continued</td>
<td>Chapters 19 and 20</td>
<td>Problem Set 5</td>
</tr>
<tr>
<td>8</td>
<td>10/18</td>
<td>The Economy in the Medium Run: The Neoclassical Model, Continued</td>
<td>Chapters 21 and 22</td>
<td>Problem Set 6</td>
</tr>
<tr>
<td>9</td>
<td>10/25</td>
<td>Midterm Exam</td>
<td></td>
<td></td>
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<tr>
<td>10</td>
<td>11/1</td>
<td>The Economy in the Short Run: The New Keynesian Model</td>
<td>Chapters 24 and 25</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>11/8</td>
<td>The Economy in the Short Run: The New Keynesian Model, Continued</td>
<td>Chapter 26</td>
<td>Problem Set 7</td>
</tr>
<tr>
<td>12</td>
<td>11/15</td>
<td>The Economy in the Short Run: The New Keynesian Model, Continued</td>
<td>Chapters 27 and 28</td>
<td>Problem Set 8</td>
</tr>
<tr>
<td>13</td>
<td>11/22</td>
<td>The Economy in the Short Run: The New Keynesian Model, Continued</td>
<td>Chapter 29</td>
<td>Problem Set 9</td>
</tr>
<tr>
<td>14</td>
<td>11/29</td>
<td>Money &amp; Banking</td>
<td>Chapters 31 and 32</td>
<td>Problem Set 10</td>
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<tr>
<td>15</td>
<td>12/6</td>
<td>The Microeconomics of Macroeconomics: Consumption and Saving</td>
<td>Chapters 9-11</td>
<td>Problem Set 11</td>
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<tr>
<td>16</td>
<td>12/13</td>
<td>Final Exam</td>
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Program and University Policies

**Course Website**
Copies of the course syllabus, your grades, asynchronous lecture videos, the online discussion board, student presentations, and other relevant links and documents will be posted on the course website. Problem sets and exams will also be submitted through the course webpage. You can access the site via [www.elms.umd.edu](http://www.elms.umd.edu). You will need to use your University of Maryland “directory ID” and password.

**Email**
The University has adopted email as the primary means of communication outside the classroom. It will be used to inform students of important announcements. Students are responsible for updating their current email address via the website link [http://www.registrar.umd.edu/current/](http://www.registrar.umd.edu/current/). (Under the first major heading of “Online Transactions” there is a link to “Update Contact Information.”)

I will do my best to respond to email within 24 hours.

**Work Load**
Mastering the material covered in this course requires a significant amount of work outside of class. Students should expect to spend more time outside of class than in class – typically at least twice as much time.

**Academic Integrity**
The University of Maryland has a nationally recognized Code of Academic Integrity. You should inform yourself about the UMD policies related to academic misconduct: [https://www.studentconduct.umd.edu/home/current-students](https://www.studentconduct.umd.edu/home/current-students). Cases of academic misconduct, including plagiarism and giving or receiving unauthorized assistance on exams, will be referred to the UMD Office of Student Conduct. If found responsible for academic misconduct, students can be subject to sanctions. The standard sanction for graduate students found responsible for cheating on exams is expulsion from the university.

The exams in this course will ask students to affirm the UMD Honor Pledge: “I pledge on my honor that I have not given or received any unauthorized assistance on this examination.”
Student Conduct
Students are expected to be active contributors to the lectures when attending and should be prepared to ask and answer questions during the lectures and to participate in the online discussion boards. Students are expected to refrain from any behavior that would distract the instructor or fellow students during synchronous lectures and to conduct themselves professionally at all times.

Excused Absences
The University of Maryland’s policy on excused absences is posted here: http://www.president.umd.edu/administration/policies/section-v-student-affairs/v-100g.

Please note: If you miss any class meetings for any reason, you are still responsible for all material covered during the meeting you missed. It is your responsibility – not the instructor’s – to get yourself caught up in the course. Instructors routinely facilitate things by posting lecture notes, etc.

If you need to miss an exam or other graded course requirement because of illness, injury, or some other emergency: Follow doctor’s orders and get documentation. Get in touch with the instructor as soon as you’re able – preferably prior to missing the exam or deadline. Communicate with the instructor to make up the course requirement as soon as possible. You are entitled to recover before you make up the course requirement, but you are not entitled to extra days to study beyond the time the doctor's note says you’re incapacitated. If you are incapacitated for more than a week or so beyond the end of the term, your grade in the course will be an “Incomplete.” In such cases you must negotiate a plan with your instructor for completing the course requirements. Once you make up the course requirement the instructor will change your “I” to the appropriate letter grade.

School Closing and Delays
In the unlikely event that weather or some other event causes a delay or closing, information can be found on the campus website and the snow phone line: (301) 405-SNOW (405-7669). The program director will always announce cancellation information to the program as an announcement on the program’s ELMS/Canvas site. This will generally be done by 1:00 PM on days when weather or other factors are an issue.

UMD Counseling Center
Sometimes students experience academic, personal and/or emotional distress. The UMD Counseling Center in Shoemaker Hall provides comprehensive support services
that promote personal, social, and academic success. The cost of these services is covered by the fees you already paid when you registered for classes, and there is no additional charge if you use the services. Proactively explore the range of services available, including the Counseling Service, Accessibility and Disability Service, Learning Assistance Service, and the Testing Office, all described at http://www.counseling.umd.edu/.

**Students with Disabilities**
The University of Maryland does not discriminate based on differences in age, race, ethnicity, sex, religion, disability, sexual orientation, class, political affiliation, or national origin. Reasonable accommodations will be arranged for students with documented disabilities. Students who have an accommodations letter from the Accessibility and Disability Service (ADS) should meet with me during the first week of the term to discuss and plan for the implementation of your accommodations. If you require reasonable accommodations but have not yet registered with ADS, please contact the Accessibility and Disability Service at 301-314-7682 or adsfrontdesk@umd.edu.

**Academic Progress**
The UMD Graduate School requires that students maintain a GPA of at least 3.0. Students whose cumulative GPA falls below 3.0 will be placed on academic probation by the graduate school. Students on academic probation must ask the program’s director to petition the graduate school if they want to remain enrolled in the program. The petition must include a plan for getting the student’s GPA up to at least 3.0. Students who do not live up to their plan can have their enrollment in the program terminated without having earned the degree. Note: a grade of “B” corresponds to a GPA of 3.0. A grade of “B-” corresponds to a GPA of 2.7.

**Graduate Academic Counselor**
The UMD Graduate School also has an academic counselor available to support students who are having difficulty navigating mental health resources on campus, are considering a leave of absence and/or need assistance finding mental health care off campus. The Graduate Academic Counselor also facilitates bi-weekly Graduate Student Circle Sessions which provide an opportunity to learn about resources and connect with other graduate students. Students can learn more about the Graduate Academic Counselor by going to: https://gradschool.umd.edu/gradcounselor.

**Access to Morrill Hall and Morrill 1102**

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Morrill Hall is locked every day from 7:00 p.m. - 7:00 a.m. Your university ID gives you swipe access to the back door of the building.