ECON642 — Topics in Applied Macroeconomics

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

Instructor: Scott W. Ohlmacher
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TA: Jake Kramer
kramerj@umd.edu

Office Hours: Thursdays, 5:30-6:30 PM
or by appointment

Synchronous Online Class Time: Tuesdays, 6:45 PM-8:45 PM EDT
Classes may be extended as necessary
30-minute break, 7:30-8:00 PM EDT

Course 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.

Course Structure
Due to the ongoing COVID-19 pandemic, this course will be conducted entirely online for the 2021 Summer term. Every Tuesday, I will lead two 45-minute synchronous lectures: one from 6:45-7:30 PM EDT and one from 8:00-8:45 PM EDT. These lectures
will be conducted via Zoom. Links to the Zoom lectures will be posted to the course webpage.

Each week, students will also be responsible for watching several short pre-recorded lecture videos. These videos will be posted to the course webpage and will cover content that is not covered during the synchronous lectures.

**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>Score Range</th>
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</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>
</tr>
<tr>
<td>B+</td>
<td>80-89</td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
</tr>
<tr>
<td>A</td>
<td>93-100</td>
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</tbody>
</table>

**Problem Sets**
There will be a total of eight problem sets for the course. Problem sets will be posted to ELMS on Wednesday 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 Tuesday 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. Both exams will be online and open book. The midterm exam will be held on Tuesday, July 6th, and will cover all material from lectures prior to that date. The final exam will be held on Tuesday, August 17th, and will only explicitly cover content from lectures held after the midterm exam. Each exam will begin at 6:45 PM EDT on the day of the exams. 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 June 15. Starting June 29, two presentations will be due by 11:59 PM EDT each Tuesday. Draft presentations should be submitted for review no later than 11:59 PM EDT the Thursday before the final presentation is due.

**Online Discussion**
Students will be asked to participate weekly in online discussions. Each week, students must submit a potential topic or question for the weekly discussion by 11:59 PM EDT on Wednesdays. New discussion topics will be posted each week by 10:00 PM EDT on Thursdays. By 11:59 PM EDT on Sundays, each student will have commented on one and only one open discussion thread. Starting June 30, submissions for topics should refer to that week’s presentations. 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 Friday. 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>
| **TUESDAY** | 6:45-7:30 PM EDT: First synchronous lecture  
8:00-8:45 PM EDT: Second synchronous lecture  
11:59 PM EDT: Problem set due, presentations due |
| **WEDNESDAY** | 12:00 AM EDT: New problem set posted  
11:59 PM EDT: Suggestions and questions for new discussion topics due |
| **THURSDAY** | 7:00-8:00 PM EDT: Instructor’s office hours  
10:00 PM EDT: New discussion topics posted  
11:59 PM EDT: Draft of presentations for the following week due |
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>6/1</td>
<td>Introduction &amp; Measuring the Macroeconomy</td>
<td>Chapters 1-3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>6/8</td>
<td>The Economy in the Long Run: The Solow Growth Model</td>
<td>Chapters 4-6</td>
<td>Problem Set 1</td>
</tr>
<tr>
<td>3</td>
<td>6/15</td>
<td>The Economy in the Long Run: Cross-Country Differences in Income and an Alternative Model; The Economy in the Medium Run: The Neoclassical Model</td>
<td>Chapters 7, 8, and 18</td>
<td>Problem Set 2</td>
</tr>
<tr>
<td>4</td>
<td>6/22</td>
<td>The Economy in the Medium Run: The Neoclassical Model Continued</td>
<td>Chapters 19-21</td>
<td>Problem Set 3</td>
</tr>
<tr>
<td>5</td>
<td>6/29</td>
<td>The Economy in the Medium Run: The Open-Economy Neoclassical Model</td>
<td>Chapters 22 &amp; 23</td>
<td>Problem Set 4</td>
</tr>
<tr>
<td>6</td>
<td>7/6</td>
<td><strong>Midterm Exam</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7/13</td>
<td>The Economy in the Short Run: The New Keynesian Model</td>
<td>Chapters 24-26</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>7/20</td>
<td>The Economy in the Short Run: Monetary Policy in the New Keynesian Model</td>
<td>Chapters 27, 28, and 30</td>
<td>Problem Set 5</td>
</tr>
<tr>
<td>9</td>
<td>7/27</td>
<td>Money &amp; Banking</td>
<td>Chapters 31 and 32</td>
<td>Problem Set 6</td>
</tr>
</tbody>
</table>
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. 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/. (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.

Contact Hours
Three credit master’s-level courses at the University of Maryland require a minimum amount of contact between instructors and students. Our courses’ 12 weekly meetings only satisfy 80% of the university’s contact requirement. The other 20% is satisfied by weekly mandatory and graded online contact. In principle, the contact hours requirement could be satisfied by scheduling 3 additional 150-minute meetings per term, or 6 additional 75-minute meetings, or 10 additional 45-minute meetings. But in practice the contact hours requirement is satisfied by the weekly online discussions. The weekly online discussions are a more flexible way to ensure that our program’s courses in DC provide the same level of student-instructor contact as the traditional
15-week face-to-face version of the same course when it is taught on campus in College Park.

**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. The courses in our DC program are 12-week courses that cover all the same material as a traditional semester-long 3-credit course (15 weeks). The compressed schedule makes it possible to complete our degree in just 15 months if you take 2 courses each term. This compressed schedule also implies an accelerated pace with an average of 25% more work per week in a given course (15/12 = 1.25). The normal full-time load in a master’s program is 3 courses per semester, or 6 courses per year. The weekly work load when taking 2 of our DC courses per term is equivalent to the load from 2.5 "normal" 15-week courses. So 2.5/3 = 83% of a full-time load. Students who take 2 courses per quarter in our program complete 8 courses per year. So over the course of a year, taking 2 courses per quarter in our DC program is equivalent to 133% of a full-time load (8/6 = 1.33).

**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. 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 synchronous lectures when attending and should be prepared to ask and answer questions during the synchronous 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 EDT 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,
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.