ECON 6201-090: Advanced Macroeconomic Theory

UNC Charlotte, Department of Economics, Fall 2019

1 Contact Information

Instructor: Dr. Musab Kurnaz
Office: Friday 217A
Office Hours: T& Th 10:45 am – 12:00 pm or email appointment
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Teaching Assistant: TBD
Email: tbd@uncc.edu

Course Website: Canvas

2 Important Dates & Times

<table>
<thead>
<tr>
<th>Meetings</th>
<th>Day</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Meetings</td>
<td>T</td>
<td>5:30 pm - 8:15 pm</td>
<td>Center City 806</td>
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<tr>
<td>Exams</td>
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<tr>
<td>Midterm 1:</td>
<td>T</td>
<td>Tuesday, Sept 17, 2019</td>
<td>in class</td>
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<tr>
<td>Midterm 2:</td>
<td>T</td>
<td>Tuesday, Oct 22, 2019</td>
<td>in class</td>
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<td>Midterm 3:</td>
<td>T</td>
<td>Tuesday, Nov 19-26, 2019</td>
<td>take home</td>
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<tr>
<td>Final Exam:</td>
<td>T</td>
<td>Tuesday, Dec 3-12, 2019</td>
<td>take home</td>
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3 General Information

Course Description: The course is an introduction to graduate level macroeconomics. We will study important topics including long-run economic growth, short-run fluctuations in output and employment (business cycles), and issues in macroeconomic policy (fiscal and monetary). It is impossible to cover all important macroeconomic topics in one semester so, naturally, the course is selective. However, while the set of economic topics explicitly covered is selective, we will utilize a general conceptual framework, which is the core of virtually all modern macroeconomic analyses, irrespective of the particular topic at hand. This general framework is based on explicit dynamic equilibrium models in which the relevant economic agents (such as households or firms) solve dynamic optimization problems. The methods we will study have mainly been developed over the past 30 years and reflect the work for which economists like Robert Solow (1987), Robert Lucas (1994), Finn Kydland and Edward Prescott (2004), or Thomas Sargent (2011) have received Nobel prizes.

1The instructor keeps the right to change the syllabus slightly, not dramatically.
**Course Objectives:** By the end of the course, students should be able to understand:

1. seminal advances in macroeconomics
2. The details of fundamental (often technical) methods to analyze macroeconomic problems at the intellectual level employed in scientific journal articles (as opposed to newspaper articles and undergraduate textbooks).
3. The connection between the theory (macroeconomic models) and the data

**Course Format:** We will mostly cover the main parts (the intuition of the materials) of chapters via powerpoint presentation and the board. However, I expect you to go over the remaining by yourself.

**Textbook:** No required textbook. Suggested textbooks are:


**Non-Mandatory Prerequisites:**

1. Standard notation for multivariate functions
2. Partial and total derivatives of multivariate functions
3. Constrained optimization of multivariate functions, especially the Lagrange and Kuhn-Tucker theorems
4. Solution methods for first order difference and differential equations

Students who do not have the above prerequisites are still welcome to the class, but are expected to put in the necessary extra effort to self study these prerequisites.

**4 Course Evaluation & Grading**

Your overall grade for this course has the following components:

- **Five of Homework Assignments (4% each)** 20%
- **Three Midterm Exams and One Final Exam (20% each)** 80%
- **Two Referee Reports (5% each)** 10%
4.1 Homework Assignments

Homework assignments will be graded out of 100. You will only receive very minimal comments (if any) on your assignments. However, there will be a detailed answer key for each problem set. The answer keys will provide you with what I consider a good answer to the question asked. Based on my answer keys, it is your responsibility to check what went well and what did not go so well. I encourage you to consult me in office hours if you cannot figure out whether and/or why your answers differ from the ones on the answer key or if you have any other questions about the homework and/or the associated answer key. To receive full credit you must hand in the homework on or before the posted due date.

4.2 Referee Reports

During the semester, I will assign some academic papers to be read. Students can write a formal referee report on two papers to earn 10%. The reports should at least address the following subjects:

1. What is the research question of the paper?
2. Why should we care about this question?
3. What methods are used by the authors to solve the question?
4. What are the answers?
5. Why did that paper published in such a journal like this?
6. If you were the referee and you wanted to reject the paper to be published, what would be your critics?
7. If you were one of the authors, what other things than the authors would you do?

4.3 Exams

There will be four exams (three midterms and one final). There will be NO MAKEUP EXAMS! If you miss an exam (for any reason) you will receive zero credit on that exam.\footnote{I may consider re-weighting the exam grades if a student brings a verified letter in writing by the Dean of students’ office.}

Exam Grading Policy: The maximum score on each exam will be 100%. All questions will be free response questions. Exam questions will be similar to those on the test and quiz assignments. Your answers will be graded in detail. You will receive partial credit for partially correct answers if the question states you can partial grade.

Generally speaking, the most important parts of your answer are your detailed derivations and written arguments. Simply writing one number (or mathematical expression) as the final answer will give you almost no credit (even if the number or expression is correct). A logically correct argument and derivation, with an eventual wrong outcome, will in most cases result in more partial credit than the correct number without any argument.

4.4 Class Grade & Curve

The total grade a student can get is 110% (!). But, your letter grade will be determined based on the following table:
<table>
<thead>
<tr>
<th>Overall Grade (%)</th>
<th>Letter</th>
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<tbody>
<tr>
<td>100-85</td>
<td>A</td>
</tr>
<tr>
<td>84.9-70</td>
<td>B</td>
</tr>
<tr>
<td>69.9-55</td>
<td>C</td>
</tr>
<tr>
<td>54.9-50</td>
<td>D</td>
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<tr>
<td>below 50</td>
<td>F</td>
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5 General Rules

**Attendance:** Classroom attendance is strongly recommended. We will be covering a substantial amount of material in this course, and you will probably find that the easiest way to keep up (and find out what I think is important) will be to attend class and discussion sections. I expect you to be in class on time and stay for the duration. If you do not plan to attend the entire lecture, please see me in advance or refrain from coming to class.

**Communication:** Communication with those outside of class while class is in progress is not acceptable. (In other words, turn off all communication devices prior to the start of class.) Students are expected to check their UNC Charlotte e-mail (username@uncc.edu) as well as the class website (Canvas) regularly for correspondence and updates regarding the course.

**Accomodation Policy:** UNC Charlotte is committed to access to education. If you have a disability and need academic accommodations, please provide a letter of accommodation from Disability Services early in the semester. For more information on accommodations, contact the Office of Disability Services at 704-687-0040 or visit their office in Fretwell 230.

**Recording in the Classroom:** Electronic video and/or audio recording is not permitted during class unless the student obtains permission from the instructor. If permission is granted, any distribution of the recording is prohibited. Students with specific electronic recording accommodations authorized by the Office of Disability Services do not require instructor permission, but the instructor must be notified of any such accommodation prior to recording. Any distribution of such recordings is prohibited.

**Exam Bathroom Policy:** All exams will be 60 minute exams. Please use the bathroom before the start of the exam as it is disruptive for other students if somebody leaves the room in the middle of the exam. Anybody who needs to leave the room during exams (e.g. to go to the bathroom) must leave his/her exam with me (or the person proctoring the exam) and must also leave any electronic devices that he/she carries in his/her pockets (e.g. cell phone, iPod, iPad, Kindle, etc.) with me (or the person proctoring the exam) before leaving the room.

**Regrading Policy:** If you would like your exam re-graded, you must submit a written re-grade request within one week of receiving your graded exam. Your request should point out the question(s) where you think you deserve additional credit, along with an explanation. Please note that your entire exam will be reviewed, and your overall exam score may go up or down.
Email Policy: Make sure to start the subject with the course id. For example, you will ask for a setup meeting. The subject should be “Econ 6201 - Meeting”. This way you are guaranteed to be replied within 2 business days. This way, I will understand that a student of my class is writing me and s/he is prioritized in the email list.

No Screen: While in class, I expect you to follow my “no screen” policy. I do not want to see any cell phones. Leave them in your backpack/purse/pocket (with the sound turned off) during class. Laptops/Tablets are strongly discouraged. They will not be very helpful for note taking, as much of the class will require writing equations, graphs, etc. If you absolutely must use one, please talk to me about it in person.

Last Minute Calls: Unfortunately, I will not be able to help you if everything is finished and you still need some help. For example, it is possible that a good student gets a low grade which may be because of so many reasons. However, if you want to improve your grade, I expect you to email me to make an appointment so that we can create a pattern in which you will much better grades. When every exam and quizzes are graded, and you still need a better grade for some reason (lets say graduation), I will not be able to help you. In short, it is your responsibility to inform me about your situation and your aim of taking this course in advance, so that I can help you.

Academic Integrity: Please note that academic misconduct (cheating) will NOT be tolerated. In addition, students have the responsibility to know and observe the requirements of University Policy 407: The Code of Student Academic Integrity (http://legal.uncc.edu/policies/up-407). This code forbids cheating, fabrication or falsification of information, multiple submissions of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty. Academic evaluations in this course include a judgment that the student’s work is free from academic dishonesty of any type; and grades in this course therefore should be and will be adversely affected by academic dishonesty. Students who violate the code can be expelled from UNC Charlotte. The normal penalty for a first offense is zero credit on the work involving dishonesty and further substantial reduction of the course grade. In almost all cases, the course grade is reduced to U. Copies of the code can be obtained from the Dean of Students Office. Standards of academic integrity will be enforced in this course. Students are expected to report cases of academic dishonesty to the course instructor.

Statement on Diversity: The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

6 Tentative Course Schedule

Below is a tentative schedule of the topics I plan to cover. However, there is no guarantee that we follow this schedule precisely. We may deviate from this schedule as the course progresses depending on time and student interest. It is your responsibility to keep up with adjustments made throughout the course.³

³It is likely that we will not have a class on November 26.
Advanced Macroeconomic Theory
A. Cross Country Income Differences and Growth
B. Intertemporal Consumption and Dynamic Optimization
C. Endogenous Growth
D. Models of Business Cycles
E. Economic Policy Issues