LEARNING GOALS. The main goal of this course is for students to acquire analytical skills required to solve problems in macroeconomics. Acquisition of these skills is a key first step in mastering the material covered in the macroeconomics and monetary economics field courses offered by the program, and these skills also are relevant for field courses in applied microeconomics and in financial economics. Finally, these skills also play a key role in selecting important topics to research in a dissertation and in successfully completing that research.

Skills begin with a firm understanding of microeconomic theory as it is typically applied to large groups of individuals interacting over long periods of time. They also begin with a basic understanding of macroeconomic facts. The development of skills involves fostering good macroeconomic intuition, learning clear diagrammatic analysis, and mastering the use of mathematics, primarily the differential calculus of constrained utility maximization. As indicated by the specific topics covered in the course calendar below, the course emphasizes the macroeconomics and microeconomics of consumption, saving, and labor supply behavior of households. Its ultimate aim is to make predictions about behavior at the macroeconomic level.

The basic theory and the mathematics that underlies it are developed in the lectures and in the textbook. Students are required to complete five homework assignments. These assignments give them exposure to solving macroeconomics problems and allow students and the instructor to evaluate their progress in acquiring the analytical skills described above. Highlights from the problem sets are discussed in class after the students complete them. In addition, there is a midterm examination and a final examination, both of which consist of problems in macroeconomics. These problems are very similar to those that appear on the First Examination in Macroeconomics. The midterm is discussed in class the week after it is given.

OFFICE HOURS. I will be available on Mondays before class and on “seminar Fridays” in room 5304. If I am not in 5304, I will have left a notice on the door regarding my location. Please email me in advance so that I can make sure I am available. “Seminar Fridays” means those Fridays during which we have a health and demography seminar or macro brownbag at the Grad Center. I am always available for help over email.

REQUIRED TEXT. We will use Advanced Macroeconomics 3rd ed. by David Romer, which is the dark red one. Please note there are significant differences between editions. You should purchase this book.

OTHER READINGS. You will notice that this syllabus contains a ton of other readings. I have provided these mostly as background for those students interested in further investigation, but in a few cases the problem sets require you to read them. Ideally, you will find the time to scan through them all. My suggestion is that for each, you (1) read the title and abstract, (2) skim through the introduction and conclusion, then (3) briefly scan the rest, before you finally (4) move on unless you want to read it in greater detail.
COURSE REQUIREMENTS. There will be five problem sets graded on a check-plus, check, check-minus basis. It is of utmost importance that you just do the work and hand it in on time. I will not accept late problem sets. A check-plus can make up for a check-minus, but even a student with all check-minuses will get 90% of the total points available on the problem sets, if he or she turns all of them in on time.

Outside of class attendance and participation, the problem sets are the most valuable tool you have for learning the course material. Feel free to form study groups in order to cover and learn the course material, but you must submit your own work. Copying answers will result in a zero for all students whose problem sets are identical.

The problem sets will be handed out and then due in class on the dates listed in the course schedule in this syllabus. After handing them out, I will also post the problem sets online on the Blackboard course website (see below). Problem set answer keys will also appear on Blackboard.

The midterm exam will be held in class on Monday, November 2. There will also be a final exam, which is cumulative, during normal class time and in the usual classroom on December 21.

GRADING. I will determine your final grade based on your performance using the following weights on the course requirements:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Problem sets</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm exam</td>
<td>40%</td>
</tr>
<tr>
<td>Final exam</td>
<td>50%</td>
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</table>

ACADEMIC HONESTY. I take cheating very seriously. Cheating consists of acts like copying another student’s problem set or exam; copying my lecture slides and turning them in; discussing an exam with anyone during the exam; bringing crib sheets, notes, or other paraphernalia to the exam; and general tomfoolery. Cheating on a problem set earns you a zero and a warning. Cheating on an exam earns you an immediate F for the class and a referral to the appropriate office.

WEB SITES. Course materials will appear on Blackboard. There is also a publicly viewable course website where I will place the syllabus but nothing else.

The Blackboard website is available at http://www.cuny.edu through the Log-in link at the bottom on the left-hand side. Once logged in, look for “Blackboard.”

Help for Blackboard is available at http://qcpages.qc.cuny.edu/edtech/BlackBoard/students.html

PREPARATION FOR CLASS. Meeting only once a week for a total of 14 meetings including the midterm is a rough schedule for you, the students. You must prepare in advance for class and participate in order to get anything out of it. Read the assigned readings in the Romer textbook prior to class so you know what to expect. As for the additional readings, I suggest you read the title, abstract, conclusion, and scan the rest. Then, if you have more time and interest, go back and read the entire document. The key for you is to see what is out there, not digest every single word and concept.

STUDENTS WITH DISABILITIES are encouraged to see the instructor, who will work with students and the Graduate Center ADA Coordinator Matthew G. Schoengood, Vice President for Student Affairs, Room 7301; Telephone: 1-212-817-7400, to address special needs.
For each class, I have listed the readings in the order I think you should read them. You should always read the passages in the Romer textbook. Readings preceded by an asterisk are more dense and should be skimmed.


Class 2: Finishing the Solow Model, population and the environment


Class 3: Cross-country income differences, institutions, and health


Class 4: The Ramsey-Cass-Koopmans Model and endogenous capital accumulation


Class 5: The Ramsey-Cass-Koopmans Model II and applications


Class 6: The Diamond Model and overlapping generations


Class 7: New Growth Theory, models of R&D, knowledge production, population, and health


**MIDTERM EXAM in class**

**Class 8: Introduction to and overview of Fluctuations, start Real Business Cycle Theory**


**Class 9: Real Business Cycle Theory II**


**Class 10: Consumption, the life cycle, and the Permanent Income Hypothesis**


**Class 12: Consumption, asset pricing, and excess sensitivity**


**Class 13: Investment with fixed adjustment costs, q-Theory**


**Class 14: Investment under uncertainty and market imperfections**


<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
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<tbody>
<tr>
<td>1</td>
<td><strong>31-Aug</strong>&lt;br&gt;Class 1: Growth part 1 of 7&lt;br&gt;Introduction, motivation, begin the Solow Model&lt;br&gt;Reading: Romer, Chapter 1; Problem Set 1 handed out</td>
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<tr>
<td>2</td>
<td><strong>7-Sep</strong>&lt;br&gt;NO CLASSES SCHEDULED</td>
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<tr>
<td>3</td>
<td><strong>14-Sep</strong>&lt;br&gt;Class 2: Growth part 2 of 7&lt;br&gt;Finish the Solow Model&lt;br&gt;Reading: Romer, Chapter 1</td>
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<tr>
<td>4</td>
<td><strong>21-Sep</strong>&lt;br&gt;Class 3: Growth part 3 of 7&lt;br&gt;Cross-country income differences&lt;br&gt;Reading: Romer, Chapter 3 Part B; <strong>Problem Set 1 due</strong>&lt;br&gt;Problem Set 2 handed out</td>
</tr>
<tr>
<td>5</td>
<td><strong>29-Sep, TUESDAY!!</strong>&lt;br&gt;Class 4: Growth part 4 of 7&lt;br&gt;The Ramsey-Cass-Koopmans Model I&lt;br&gt;Reading: Romer, Chapter 2 Part A</td>
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<td>6</td>
<td><strong>5-Oct</strong>&lt;br&gt;Class 5: Growth part 5 of 7&lt;br&gt;The Ramsey-Cass-Koopmans Model II&lt;br&gt;Reading: Romer, Chapter 2 Part A; <strong>Problem Set 2 due</strong>&lt;br&gt;Problem Set 3 handed out</td>
</tr>
<tr>
<td>7</td>
<td><strong>14-Oct, WEDNESDAY!!</strong>&lt;br&gt;Class 6: Growth part 6 of 7&lt;br&gt;The Diamond Model of overlapping generations&lt;br&gt;Reading: Romer, Chapter 2 Part B</td>
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<td>8</td>
<td><strong>19-Oct</strong>&lt;br&gt;Class 7: Growth part 7 of 7&lt;br&gt;New Growth Theory&lt;br&gt;Reading: Romer, Chapter 3 Part A; <strong>Problem Set 3 due</strong></td>
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<tr>
<td>9</td>
<td><strong>26-Oct</strong>&lt;br&gt;Class 8: Fluctuations part 1 of 2&lt;br&gt;Introduction to Fluctuations, the Real Business Cycle&lt;br&gt;Reading: Romer, Chapter 4</td>
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<tr>
<td>10</td>
<td><strong>2-Nov</strong>&lt;br&gt;IN-CLASS MIDTERM EXAM</td>
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<tr>
<td>11</td>
<td><strong>9-Nov</strong>&lt;br&gt;Class 9: Fluctuations part 2 of 2&lt;br&gt;Real Business Cycle II&lt;br&gt;Reading: Romer, Chapter 4; Problem Set 4 handed out</td>
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<tr>
<td>12</td>
<td><strong>16-Nov</strong>&lt;br&gt;Class 10: Consumption part 1 of 2&lt;br&gt;Consumption I: Permanent Income and the Life Cycle&lt;br&gt;Reading: Romer, Chapter 7; <strong>Problem Set 4 due</strong></td>
</tr>
<tr>
<td>13</td>
<td><strong>23-Nov</strong>&lt;br&gt;Class 11: Consumption part 2 of 2&lt;br&gt;Consumption II: Asset pricing&lt;br&gt;Reading: Romer, Chapter 7; Problem Set 5 handed out</td>
</tr>
<tr>
<td>14</td>
<td><strong>30-Nov</strong>&lt;br&gt;Class 12: Investment part 1 of 2&lt;br&gt;The q-Theory of Investment&lt;br&gt;Reading: Romer, Chapter 8</td>
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<tr>
<td>15</td>
<td><strong>7-Dec</strong>&lt;br&gt;Class 13: Investment part 2 of 2&lt;br&gt;Investment under uncertainty and imperfections&lt;br&gt;Reading: Romer, Chapter 8; <strong>Problem Set 5 due</strong></td>
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<tr>
<td>16</td>
<td><strong>14-Dec</strong>&lt;br&gt;NO CLASSES SCHEDULED</td>
</tr>
<tr>
<td>17</td>
<td><strong>21-Dec</strong>&lt;br&gt;Final exam during normal class time</td>
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