

Professor N. Gregory Mankiw  
[ngmankiw@harvard.edu](mailto:ngmankiw@harvard.edu)  
Littauer 223

Thomas Baranga  
[baranga@fas.harvard.edu](mailto:baranga@fas.harvard.edu)  
Littauer 111  
Office Hours: Weds 3-4 pm, Thurs 2-4 pm

Section Leaders:

Ken Abante, Abdullah Al Bawardy, Samuel Atwell, Thomas Baranga, Hugues Boulnois, Phil Caruso, Willy Chotzen-Freund, Joanna Cornell, Zachary Dearing, Nicole Gilmore, Diana Goldemberg, Ian Ferrell, Maria Florez, Veronica Fulton, Abhisek Ghosh, June Han, Andrew Henderson, Kibrewossen Meaza, Joe Meeker, Li Pan, Guillaume Sajust de Bergues, Jordan Shapiro, Erin St. Peter, Richard Sun, Will Tadros, Roger Vargas, Viroopa Volla, Adam Watkins, Spencer Welch, Megan White, Steve White, Yizi Yang, Lena Yoon

Course Office: 107 Littauer Center, 495-2167, Paul Kelso. The office is open from 8:30 a.m. - 4:00 p.m. Monday through Friday. Our email address is: [pkelso@fas.harvard.edu](mailto:pkelso@fas.harvard.edu). Our website address is: <https://canvas.harvard.edu/courses/44089>

## **SYLLABUS**

The economist John Maynard Keynes wrote that "the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood." In Ec 10a and Ec 10b, we hope to teach you these economic ideas and help you understand why they can be so very powerful. Economics is not primarily a set of answers, but rather a method of reasoning, and it is valuable both for eventual economics concentrators and for those who plan no further work in the field (Ec 10a is a prereq for Ec 10b).

In the Fall semester (Ec 10a), we focus on microeconomics, which is the study of the interaction of people (consumers) and firms in markets. Since you likely live in a market economy, this study will help you to understand how your society organizes its economic affairs. We will examine how the forces of supply and demand operate in the markets for goods, labor and capital. Once we have mastered some basic techniques for thinking about economic problems, we will apply the techniques to important social issues such as health care reform, tax policy, poverty, education, regulation, global warming, and international trade.

## General Education Credit

For students graduating in 2019:

- You may count the combination of Economics 10a *and* 10b to fulfill *either* EMR or USW (but not both), when you complete both courses with passing letter grades before Fall 2019.
  - If you have fulfilled the SW or USW requirement with a course that carries Gen Ed credit, you may count *either* Econ 10a *or* 10b for SW or USW (with passing letter grades, completed before Fall 2019).

For students graduating after 2019:

- Ec 10a *and* Ec 10b, taken before Fall 2019, can count for EMR or USW, but not both; credit will then be appropriately transferred to the new College requirements.
  - If the combination of Ec 10a and Ec 10b are used for this purpose, neither may be used to fulfill the Social Sciences distribution requirement (see below).
- Ec 10a *and* Ec 10b, taken any time, can be used to fulfill the EMR requirement.
- Ec 10a *or* Ec 10b, taken any time, can fulfill the new distribution requirement in the Social Sciences as long as neither is used to fulfill USW or EMR (or the equivalent new requirements). See note above.
  - This will not be reflected on your Academic Advising Report until Fall 2019, when all returning students will be transitioned to the new College requirements.

Please contact the Program in General Education with any additional questions:

<https://generaleducation.fas.harvard.edu/questions>

## Economics Concentration Requirements

Ec 10a and Ec 10b are required courses for both economics concentrators and students pursuing a secondary in Economics. However, students who wish to place out of Ec 10a and or Ec 10b can replace each waived course by taking an additional upper-level Economics elective instead.

## Course Requirements

### *1. Lecture and Section Attendance*

The course is taught in a mixture of lectures and sections, meeting every Monday, Wednesday, and Friday during the term. Sections do not meet on days with lectures. In other words, on any particular Monday, Wednesday or Friday, you will either attend a lecture OR a section. The calendar at the end of this syllabus lists lecture and section dates.

Sections are important because they teach the principal tools of economics in an environment in which you can ask questions freely. All sections will cover the same material and take the same exams. The lectures (which meet in Sanders Theatre at noon) will focus on current economic problems and policy issues. The lectures are not always in lockstep with the sections, nor are they necessarily intended to be. The goal of the lectures is to provide you with perspectives on the applicability of economics, and to introduce you to some of the fascinating fields that the Harvard faculty are exploring. The lectures provide an introduction to the department and the many fields of economics.

**Choosing a Section Time:** Please use the link below to submit your section time preferences

#### **Section Preference Form**

<https://goo.gl/forms/rUGZAhK25Om0DIW82>

**The form will be available until 5pm Saturday, September 8<sup>th</sup>.**

If you have any problems sectioning, please email or call the Ec10 office for help. To be fair to all students, sections are assigned by lottery; we cannot guarantee everyone their first choice of section time (if it is a non-noon request), and we cannot grant requests to be assigned to individual section leaders.

The first section meeting will be **Monday, September 10<sup>th</sup>**. Sections will meet on the days indicated in the schedule. Section leaders will hold weekly office hours as well as offer review sessions before each exam. You will be notified via email of your section's time and location on Sunday, September 9<sup>th</sup>, prior to your first section meeting.

### *2. Exams*

During the first semester, there will be ninety-minute mid-term exams on the **EVENINGS of October 3<sup>rd</sup> and November 7<sup>th</sup>**, and a final exam on **December 15 at 9am**. The exams cover material from lectures, sections, and the readings. They are written by a rotating committee of section leaders chaired by Thomas Baranga. We post exam information and preparation materials on our course website near the time of exams. No communication is permitted between students during an exam. Calculators, books, notes, and papers are **not** permitted. Violation of the examination rules or dishonesty in an examination will result in disciplinary action. Ec 10 has a zero tolerance policy on cheating. All instances of suspected cheating will be immediately referred to the Administrative Board.

We have reserve the classrooms for a two-hour block (7:40 – 9:40 p.m.) for each of the mid-terms, although the actual exam will be ninety minutes in length. Therefore, we will have ample time both before and after the exam for the inevitable shepherding issues that always arise in a course this large. This policy affords a much more relaxed exam atmosphere, enabling *us* to gauge student learning more accurately and efficiently and enabling *you* (more importantly) to be at your best without having to worry about being late to our exam from your Stats exam before ours and being late to your Math exam after ours! We do our very best in Ec 10 to coordinate exam dates with other large courses, but we cannot guarantee that you will never have multiple semester exams on the same day.

**IMPORTANT: If you CANNOT make our evening exam times this semester, we STRONGLY encourage you to reconsider enrolling in Ec10a. We do NOT give make-up exams,** and while we certainly welcome all interested students, our exam policy will not allow us to accommodate those with evening commitments on those exam days.

### *3. Required Text and MindTap*

The course has one required reading, Mankiw's Principles of Microeconomics textbook (8<sup>th</sup> edition, 2016), or equivalently the first 22 chapters of Mankiw's Principles of Economics (8<sup>th</sup> edition, 2016). A copy of the Principles of Economics is on reserve at Lamont library.

**You will also require a subscription to MindTap in order to submit the course's mandatory problem sets and quizzes.** MindTap also hosts additional support materials, such as practice questions, an online edition of the textbook, and videos explaining important topics.

The Ec 10 office has negotiated a steep discount for the following full-year package, available through the Harvard Coop (<https://tinyurl.com/F18-ECON-10A-1>): Mankiw's Principles of Microeconomics + Principles of Macroeconomics 8<sup>th</sup> edition (ie the full Principles of Economics text), loose-leaf version + MindTap Economics, 2 terms (12 months) access. The price for this bundle is \$131.65 and includes all the materials you would need for Ec10b too (so the per-semester cost is \$66). To our knowledge, this is the cheapest possible way to obtain access to MindTap and the textbook. Professor Mankiw will donate to charity all royalties earned from Ec 10 students' purchase of these materials.

Once you have purchased your personal access code from the Coop, create an account and register here to link your code to our course's MindTap website: <https://www.cengage.com/dashboard/#/course-confirmation/MTPQLCMPVKS2/initial-course-confirmation>

If for some reason you are prompted to enter a course key to link the access code you purchase through the Coop with our course's MindTap site, the course key is MTPQLCMPVKS2.

Please take care not to lose the access code you purchase! The Coop does not know the code associated with each package they sell, and nor do we in the Ec 10 office, so once you leave the store the only record of your personal code is in your hands!

Once you have registered your access to MindTap, we encourage you to explore the platform, and to familiarize yourself with the resources it hosts. Near the top of the page, you can toggle between a weekly calendar view that helps to remind you when online assignments are due, and the outline view, which organizes resources by the relevant chapter of the textbook. Within each chapter's folder, you

can find relevant videos, practice questions, and study guides. The problems in each chapter's "Homework" folder are just for practice, not for credit, so feel free to use them without risking any harm to your grade!

#### *4. Quizzes*

For each unit, we will post a quiz, which will be available to you on MindTap, when you log into your Cengage account. You will require access to MindTap to submit quizzes, which are worth 5% of your grade.

More basic in nature than the Problem Sets, quizzes are designed to act as a quick first gauge of how well you understand concepts in each unit, and to provide written explanations of areas where you might have gaps in understanding. Consider the quizzes an opportunity to practice and hone your understanding of basic/central concepts.

Each quiz covers one unit and should take 20 minutes or so to complete. You do not have to finish a quiz in one sitting, and can save your answers and revisit them later if you are not ready to submit them for grading. Because each quiz covers a few different chapters, you might answer the questions referring to chapter 10 one day, and a week later return to the quiz to answer questions referring to chapter 11. **Once you submit your answers for grading you will not be able to change them, even if it is before the deadline.**

#### *5. Problem Sets*

There are six problem sets. Problem sets are designed to be challenging, and to take time and thoughtful consideration. They are not meant to be direct applications of section material (in contrast to quizzes); instead they are meant to test and stretch your understanding of the material.

Problem sets will also be accessible to you on MindTap when you log into your Cengage account. You require access to MindTap to complete the problem sets, which contribute 15% of your grade. Each problem set consists of some questions that must be answered and submitted online, and typically also one or two long-answer question(s) and/or graphs to be answered on paper and handed in to your Section Leader. All parts of the problem set are graded.

We encourage students to discuss the problem set questions among themselves. However, each student should independently solve the problem set on their own, and write (for the long-answer questions) and handle their own problem set solutions. We have, however, adopted a sanctioned system of group problem set submission, whereby a group of up to three students from the *same* section may submit a single response to a long-answer question (each student still has to submit their online part of the problem set). Each student in any problem set group will receive, for the long-answer question, the mark given to that group's submission. Participation in this system is VOLUNTARY. Group problem set submission is an "opt in" system rather than an "opt out" one.

## Assignment Schedule

Assignment	Issued	Due
Problem Set 1	9/14	9/21
Quiz 1	9/19	9/26
Problem Set 2	9/21	9/28
Quiz 2	9/24	10/1
Problem Set 3	10/5	10/12
Quiz 3	10/8	10/15
Problem Set 4	10/24	10/31
Quiz 4	10/29	11/5
Problem Set 5	11/9	11/16
Problem Set 6	11/28	12/5
Quiz 5	12/5	12/12

## Simultaneous Enrollment

Simultaneous enrollment in Ec 10a and another 12 p.m. course that meets Mondays, Wednesdays, or Fridays is **not** permitted. Lecture attendance is mandatory, and lectures are not videotaped.

## Prerequisites

Ec 10a has no prerequisites. The only mathematics used is elementary high school algebra. We will *not* use calculus. The Department of Economics strongly encourages students considering a concentration in economics to take this course in their freshman year. Ec 10a *and* Ec 10b or the equivalent (the complete two-semester sequence) is required of all economics concentrators and for a secondary in economics.

## Further Readings

A second source of readings are the “Additional Readings” posted on our course website. The readings are predominantly comprised of journal articles and excerpts from books. The goal of these readings is to stretch your economics muscles and expose you to relevant current research in the field. These additional readings are optional.

Finally, the course website hosts Helpful Hints. These generally cover analytic material. Most of the material in the Helpful Hints will reinforce what you will learn in section, but there will be some material in them that will not be discussed in class, but which may be useful for tackling problem sets.

## Free Lunch!

Don’t let anybody tell you there is no such thing as a free lunch. Most of our guest speakers will have lunch after their lecture with the course’s section leaders, Professor Mankiw, and a group of students selected by lottery. Look out for announcements of lunch lotteries before each guest lecture.

## Unit Review Program

The Unit Review Program (URP) is an important additional resource for Ec 10 students. The URP helps you measure your grasp of the course material, gives you practice solving problems, offers you informal tutoring in a low-stress environment, and provides an opportunity to earn extra credit!

### *1. How It Works*

For the purposes of the URP, the class's material is divided into five units (which are based on, but combine some elements of, the seven units into which the textbook's material is structured: unit I of the URP combines the first two units in the textbook, and unit V of the URP combines the sixth and seventh units in the textbook). For each unit of material, you can attend one of the URP's evening sessions and answer a set of written Unit Review Problems. An upperclass undergraduate (the "tutor") then evaluates your answers and discusses them with you in small groups or in a one-on-one session (whenever possible). If your answers are almost completely correct, you earn a "Pass" and receive a small boost to your semester percentile score, which could potentially affect your overall letter grade (see the section on grading below). If the tutor does not feel that you are in command of the material, you receive an "Incomplete." There is no penalty if you receive an "Incomplete", but it does not earn you any extra credit. The tutor will either recommend trying another set of Unit Review Problems immediately, or will suggest that you review the material before attempting to solve Unit Review Problems once more.

### *2. The Goal of the URP*

Solving Unit Review Problems reinforces your understanding of the material and give you a chance to judge your comfort level as well as get real-time feedback and discussion. When the URP is quiet, tutors are also available to answer your questions on Ec 10 material more broadly, i.e. serve as drop-in tutors. The best time to take advantage of the URP's tutoring function is early in a testing session, rather than just before the deadline, and early in the evening.

### *3. Material Covered*

Unit Review Problems cover material taught in section; they do not include lecture material or material covered in the text or readings. You have as much time as you need to solve Unit Review Problems (as long as you finish before the Unit Review session is over), but plan on spending about a half an hour on a review. You may not use notes or receive help from other students.

### *4. Mechanics*

Unit Review Problems are offered at the end of each unit, and run for eight days, on Monday, Tuesday, Wednesday, Thursday, and Sunday evenings starting at 6:30 p.m. All completed answers must be *turned in* by 9:00 p.m. You should bring paper and a pen or pencil with you. Loose-leaf paper will often, but not always, be available. The schedule and location for the URPs will be posted on the Ec10 website.

To avoid congestion at the Unit Review Tests, students are assigned to groups, each with its own Unit Review deadline. You will be allocated to a group based on *the first letter of your section leader's last name*. The order of the groups' deadlines rotates for fairness. If you miss your group's deadline, you may still go to the URP and solve Unit Review Problems for practice, but *you will not*

*receive credit for them.* To be fair to all students, Unit Review Problem deadlines are firm, and there are no exceptions. If you have any questions about the URP, you may ask your section leader or contact Stacey Gelsheimer, the URP Coordinator, at [ec10unitreview@fas.harvard.edu](mailto:ec10unitreview@fas.harvard.edu). The Ec 10 office staff cannot help you with questions about the URP.

## **Grading**

The grade distribution in Ec 10a and in Ec 10b is intended to match roughly the grades in other large General Education courses. Basic semester grades are determined by the final exam (40%), the midterm exams (40%), and problem sets (15%: 10% for the online questions, 5% for long-answer questions) and quizzes (5%).

Small groups of section leaders grade the exams for another group of sections together. This system ensures that your section leader will not have to "squeeze" your section into a particular curve, that your exams will not be at the mercy of a large, impersonal exam-grading machine, and that your section leader will never grade your material. We do not assign students letter grades for individual exams or assignments. Instead, we track the raw scores that you receive on tests. At the end of the semester, we add up all the raw scores you have earned in the course, calculating a weighted average. We use the resulting weighted average to determine your percentile ranking in the class, which in turn determines your letter grade.

For each Unit Review "Pass" that you obtain, your semester percentile score will be raised by one point on the 100-point scale used to determine letter grades. So if your exams and problem sets put you at the top of a letter grade range, a "Pass" on each of the five Unit Reviews will push you into the next higher grade. If you take no Unit Review Problems, you will get the letter grade indicated by your exam and problem set average. In other words, we do not "recurve" the grades after adding in the Unit Review "Passes."

If you want to take the course pass/fail, bring a pass/fail form to the Ec 10 office (the relevant form should appear, pre-populated, in your student portal after the course registration deadline). Please check your own department's rules on grading status; for example, the Economics Department does not permit concentrators to take either Ec 10a or Ec 10b on a pass/fail basis.

## **Regrade Requests**

If you believe there is a substantive or arithmetic error in one of your exam grades, you may bring it to the Ec 10 office for regrading. Bring a written explanation of your request, as well as your entire exam. The entire exam will be regraded (your score could go up or down). The deadline to submit regrade requests is within one week of the in-section distribution of graded exams.



## Online Resources

Our Canvas site hosts:

- The syllabus
- The course schedule (section and lecture dates, problem set schedule, quiz schedule, reading assignment due dates)
- Announcements (such as office hours).
- URP information
- Detailed problem set answer keys
- Helpful Hints
- Exam prep material - A collection of past years' exams and their answers – these are posted a few days prior to exams
- Links to the readings
- The link to Cengage – this is the online textbook publisher. When you purchase your textbook at the Coop, you will obtain a Cengage log-in access code, which will provide you access to MindTap, which houses our problem sets, quizzes, and other useful material. Speaking of which...

MindTap hosts:

- Required Problem sets
- Required Quizzes
- Practice problems (based on the end-of-chapter problems in the textbook)
- Adaptive Test Prep (a little “A+” icon on the right hand side of the website) – allows you to build customized quizzes to test and solidify your understanding of the material before exams
- A fully electronic version of the textbook, and a bunch of other useful support material.
- (there's also a MindTap mobile app you may want to download so you can quiz yourself when waiting at the doctor's office, riding your stationary bike, etc.)

A closing note:

If you have any comments or concerns about your section or section leader (or anything else about the course), please email the Ec 10 office at [ec10@fas.harvard.edu](mailto:ec10@fas.harvard.edu). We take your opinions seriously and any conversation is completely confidential.

## **Ec 10a – Fall 2018 Lecture/Section Schedule (assigned readings in parentheses)**

Coursewide lectures in CAPS; Sections listed by Unit covered.

<b>Sept 5</b>	GREG MANKIW (Ch. 1)
<b>Sept 7</b>	GREG MANKIW (Ch. 2)
<b>Sept 10</b>	Unit I: Interdependence and the gains from trade (Ch. 3)
<b>Sept 12</b>	Unit II: Supply and Demand #1 (Ch. 4, pp. 65-72)
<b>Sept 14</b>	Unit II: Supply and Demand #2 (Ch. 4, pp. 73-8)
<b>Sept 17</b>	Unit II: Supply and Demand #3 (Ch. 4, pp. 79-85; Ch. 5)
<b>Sept 19</b>	Unit II: Supply and Demand #4 (Ch. 6)
<b>Sept 21</b>	Unit III: Markets and Welfare #1 (Ch. 7)
<b>Sept 24</b>	Unit III: Markets and Welfare #2 (Ch. 8)
<b>Sept 26</b>	Unit III: Markets and Welfare #3 (Ch. 9)
<b>Sept 28</b>	Unit IV: Economics of the Public Sector #1 (Ch. 10)
<b>Oct 1</b>	Unit IV: Economics of the Public Sector #2 (Ch. 11)
<b>Oct 3</b>	EXAM I
<b>Oct 5</b>	Unit IV: Economics of the Public Sector #3 (Ch. 12)
<b>Oct 8</b>	COLUMBUS DAY
<b>Oct 10</b>	ED GLAESER (followed by lunch)
<b>Oct 12</b>	Unit V: Firm Behavior #1 (Ch. 13)
<b>Oct 15</b>	GREG MANKIW
<b>Oct 17</b>	Unit V: Firm Behavior #2 (Ch. 14)
<b>Oct 19</b>	Unit V: Firm Behavior #3 (Ch. 14)
<b>Oct 22</b>	DAVID CUTLER (followed by lunch)
<b>Oct 24</b>	Unit V: Firm Behavior #4 (Ch. 15)
<b>Oct 26</b>	Unit V: Firm Behavior #5 (Ch. 16)
<b>Oct 29</b>	Unit V: Firm Behavior #6 (Ch. 17)
<b>Oct 31</b>	Unit VI: Economics of Labor Markets #1 (Ch. 18)
<b>Nov 2</b>	GREG MANKIW
<b>Nov 5</b>	Unit VI: Economics of Labor Markets #2 (Ch. 19-20)
<b>Nov 7</b>	EXAM II
<b>Nov 9</b>	Unit VII: Topics for Further Studies #1 (Ch. 21, pp. 425-6; 428-32; 433)
<b>Nov 12</b>	ANNE LE BRUN (followed by lunch)
<b>Nov 14</b>	AMANDA PALLAIS (followed by lunch)
<b>Nov 16</b>	Unit VII: Topics for Further Studies #2 (Ch. 21, pp. 426-7; 432-5)
<b>Nov 19</b>	Unit VII: Topics for Further Studies #3 (Ch. 21, pp. 435-40)
<b>Nov 21</b>	THANKSGIVING

<b>Nov 23</b>	THANKSGIVING
<b>Nov 26</b>	Unit VII: Topics for Further Studies #4 (Ch. 21, pp. 440-7)
<b>Nov 28</b>	DAVID LAIBSON (followed by lunch)
<b>Nov 30</b>	GREG MANKIW
<b>Dec 3</b>	GREG MANKIW
<b>Dec 5</b>	Unit VII: Topics for Further Studies #5 (Ch. 22)