

**UNIVERSITY OF GEORGIA**  
**Department of Economics**

Fall Semester 2009

**Economics 2106**  
**Principles of Microeconomics**

Prof. Greg Trandel

*(this version: August 23, 2009)*

213 Sanford Hall      M, W, F at 12:20 p.m.

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**Office Hours:** Tuesday: 11:00 a.m. – 2:00 p.m.,  
Thursday: 1:00 p.m. – 3:30 p.m.,  
or by appointment if you are not free during the above times.

**Teaching Assistant:** Dong Kwan Kim (who goes by “Kwan”),  
Office Hours: 4:00–5:00, Economics graduate student office,  
6th floor, Bank of America bldg (110 E. Clayton St.), downtown Athens.

**Nature of a Syllabus:** Note that any course syllabus is a general plan for a course. It may be necessary to deviate from the plan laid out on these pages. The instructor will describe to the members of the class any such deviations.

**Course Description:** Economic choices are necessary because resources are scarce. Much of this class analyzes how the people involved in a market system (which consists of independent consumers and producers) make these choices, and thus organize society's economic activities. The class also shows how certain criteria can be used to judge market outcomes — distinguishing functions that markets perform well from those where markets don't do well — and analyzes government's involvement in the economy.

The course both introduces rigorous microeconomic theory and shows how that theory can be applied to certain “real-world” topics. As a result, the lectures and readings address both theoretical and policy issues.

**Textbook:** *Microeconomics, 2nd edition*, by R. Glenn Hubbard and Anthony Patrick O'Brien. Almost all of this book is assigned, and you should have access to a copy of it. If you know somebody else in the class, you might want to consider sharing one (rather expensive) copy. A single copy of the book will be available at the UGA Library Reserve Desk.

**Prepared Notes:** At the start of every class, a pile of “lecture notes” will be available in the classroom. Students should pick up a copy of these notes when entering the room. Notes from the two most-recent classes will also be available.

The lecture notes have many fill-in-the-blanks that students can complete during class. There is also much other blank space on the pages. Students should use this space to take additional notes during class.

These notes are not available electronically — they can only be picked up on paper in the classroom.

**Web Pages:** Some class materials — like this syllabus — will be directly posted at the class eLearning Commons page. In addition, links to other class material — such as pre-exam sample questions (with answers and explanations) — will be placed on the eLC page. The eLC system will also be used to distribute exam scores and semester grades.

**Outside Readings:** All students are responsible for reading a number of short pieces (many taken from various newspapers and magazines) that relate to topics covered in class. Some questions based

on these readings will appear on the exams. Before each exam, the relevant readings — along with brief description of their significance — will be placed on the class eLC page.

**Exams:** There will be four in-class exams (each with 17 questions) and a final exam (with 42 questions). There are thus 110 exam questions overall. An additional ten points can be earned in ways that are explained below.

All test questions are multiple choice. Note that such questions need not test mere “memorization”. Rather, answering a test question in this class often involves solving a problem rather than merely recognizing a correct definition.

The in-class exams will be on: Wednesday, September 9th; Wednesday, September 30th; Friday, October 23rd; and Wednesday, November 18th. The exam will be the only class activity on those days. These four 17-question tests, which are noncomprehensive, cover the lecture materials (along with the relevant reading assignments and homework questions) presented up to and including the class preceding the exam. Part of that last class will be devoted to reviewing the relevant homework assignment and otherwise preparing for the exam.

During each regular class following an exam, part of the day will be spent reviewing the exam questions.

To give you an idea of the type of test questions used in this class, some sample questions will be handed out on the Monday before the first exam. [Also, remember the other sample (web) questions described above.]

The 42-question *comprehensive* multiple-choice final exam is in the regular room at 12:00 noon on Monday, December 14th.

No make-up exams will be given. If any circumstances that will prevent you from taking an exam at the regular time arise, please contact Prof. Trandel as soon as possible. If you miss an exam without making prior arrangements, you’ll receive a score of zero on that test.

**Homework:** Four homework assignments will be distributed during the semester. An assignment is due at the *beginning* of class on: Wednesday, September 2th; Friday, September 25th; Monday, October 19th; and Friday, November 13th. In each case, the homeworks will be collected, recorded, and returned you at the start of the following class meeting. Part of that class (which immediately precedes an exam) will be devoted to discussing the homework questions. The homeworks will be handed out in class (and will be available as pdf files on the class eLC page) more than one week before they are due (you’ll get the first assignment on August 24th).

The homeworks are designed both to let you practice with some of the basic tools of economics and to help you prepare for some test questions. Your homework will be graded. Note, though, that homework grades depend on whether or not you make a legitimate effort to answer the questions correctly. As far as your grade is concerned, a real effort on the homework is important; answering every question correctly isn’t. Successful completion of all four homeworks will be worth four points when semester grades are computed. If fewer homeworks receive credit, then fewer points will be awarded. Note, however, that the point formula is *not* linear; i.e., a student who gets credit on three of four homeworks will receive some, but less than three, points. How these points factor into a student’s semester grade is explained below.

A homework assignment handed in after the beginning of class on the day it is due will not be accepted. Homework can, however, be handed in early (up to 10:05 a.m. on the day the assignment is due) in Trandel’s office.

Feel free to work together on the homework assignments. However, each of you must write up and submit an independent answer sheet — word-for-word copies will not be accepted.

**Short Writing Assignments:** Each student is responsible (over the course of the semester) for two *short* writing assignments.

The point of this assignment is to encourage (require?) students to realize just how many “real-world” events can be understood and analyzed with microeconomic concepts.

In each essay, a student will describe and explain a specific *example of a particular microeconomic concept*. These examples must describe *actual* “real life” (not hypothetical, nor made-up,

not likely) events. More precisely, the examples can come either from a student's personal experience, from some event that the student observed, or from an appropriate "current event" described in the media. [If a media source is used, a brief citation must be provided (no particular format is required).]

Each essay need only be a couple paragraphs long; a student need write only enough (i) to describe the relevant economic concept, (ii) to describe a specific "real-world" event or situation, and (iii) to explain why that event is an appropriate example of the economic concept.

Of the two required essays, one *must* describe a *price change* that can be *explained* by *supply-and-demand analysis*. [With luck, students will submit a wide variety of examples. Since it seems likely that a couple examples might be overly popular, *no essays can be submitted on the prices of either Georgia Bulldog football tickets or gasoline.*]

The second essay must provide an example of *any topic* covered in this class. Possible topics include: *economic cost*, *marginal analysis*, the effects of *price controls*, *long-run market changes*, a *prisoners' dilemma*, *price differentiation*, an *externality*, etc. [One topic that — again, because it might prove to be too common — *cannot be used is the simplest type of "opportunity cost" issue (i.e., do I "study" or "go out with my friends")*; more detailed opportunity cost topics might be fine (please feel free to ask whether a possible topic is appropriate).] Since the point of this assignment is to encourage each student to discover his or her own economic applications, students *cannot submit essays* that employ examples cited either in class, on the homeworks, on the exams, or in the textbook. [If only a general example of a topic (like "pollution") is mentioned in class, an essay on a specific example of that topic would probably be acceptable. Again, feel free to ask whether a particular topic would work.]

The essays will not be given letter or number grades. They will simply be labelled as earning "credit" (one point) or needing to be "revised". An essay can need revision for any of the following reasons: the incident it cites isn't truly an example of the economic concept it is supposed to illustrate; the student's explanation of the concept, the event, or the link between them is inadequate; or the writing in the essay is substandard. After a student submits an essay, a "C" or "R" notation will be posted on the class eLC page. A "revision needed" label can be a temporary one — any essay so labelled will be returned to the student, who (if the flaw is fixable) might decide to revise the essay and resubmit it. Alternatively, a student might respond to a "revision needed" verdict by starting over with a new topic.

A student who submits one acceptable essay will receive one point; two acceptable essays are worth a total of three points.

Essays must be word-processed (or typed).

In order to spread out the grading burden, and to provide time for possible resubmissions, a student must submit an essay (possibly the price-change one, but not necessarily) no later than *Wednesday, November 11th*, which is the last class before Fall Break. [Students can, of course, hand in an essay (or two essays) before that date.] A student's second essay must be submitted no later than *Monday, November 30th*. [Again, please, consider handing in both essays well before that date.]

While the following should be obvious, here it is anyway. Any submitted essay must reflect the student's own work. Students should feel free to discuss possible topics with classmates (or friends or relatives) or with the instructor. The actual writing of the paper, however, must be entirely the student's own work.

**Web Experiments:** The class "meeting" on Wednesday, August 26th will not be a standard one. On that day, all members of the class are asked to participate in a web-based "experiment" (actually two different experiments) created by a company called Aplia.

Participating in the experiment is a class requirement, and is worth three points towards your semester grade. Students who do not participate will get zero credit for this part of their grade.

Note that you don't have to be in any particular location in order to participate. [You do, however, have to participate during class time.] The experiments are conducted over the web; you can join in using any computer that has a reliable web connection and that has JavaScript and

Flash 5 installed. [At the Aplia web site, you can run an automatic configuration test to check for these software packages.]

There's a \$15 charge for participating in the Aplia experiments.

The Aplia process will be most beneficial as a learning experience if you make all your own decisions during the experiment. If, however, the \$15 charge for Aplia is a serious impediment to participating, two (or even three) students can share the experience (and the fee) by working as a group. Students who choose this option must all be in the same physical location, and must make their decisions during the experiment together.

Students who wish to participate as a group *must* e-mail their names — and a phone number at which they can be reached during the experiment — to Prof. Trandel no later than Tuesday, August 25th.

Each student — or one student on behalf of a group — needs to register directly at [econ.aplia.com](http://econ.aplia.com). Instructions for signing up, including the course key (i.e., code number) that you'll need, will be posted on the class web page. Please note that you must register and pay at least *one hour before* participating in the experiment. [It's possible to pay at the web site with a check.] This time restriction is a real one — the Aplia software has to know how many people are participating so that it can assign roles to each player. If you don't meet the registration deadline, you may be able to observe the experiment, but you won't be able to participate in it.

The experiment will begin promptly at 12:20 on August 26th, and will take no more than fifty minutes to complete.

[In addition to the experiments, Aplia offers (at an additional cost) a substantial body of economics problem sets, news analyses, review materials, etc. This material is not assigned. If you want to obtain access to it (in order to use it as a study/review guide) please let Prof. Trandel know; you'll get permission to register (and pay) for the additional material.]

**Grading:** Your semester grade for this class will be based on your scores on the four (17-question) in-class exams, the (42-question) final, the four homeworks, the two required short essays, and the experiment. Each student's semester grade is computed as follows. Add up the number of correct answers (out of 110 questions) on the five exams. Add up to four points total based on how much credit is awarded for the four homeworks. Add up to three points based on the two essays. Add three points if you participate in the experiment. Take the sum, and divide by 120 (the maximum possible score) to compute a percentage score. [Example:  $15 + 13 + 16 + 14 + 35 + 3 + 4 + 3 = 103$ ;  $103 \div 120 = 85.8\%$ .]

Basic letter grades for the semester are then determined by applying the following scale to the student's final percentage score: 85% – 100% = A; 74% – 85% = B; 63% – 74% = C; 52% – 63% = D; below 52% = F.

Some students very near the bottom end of the A range will get an A– for the class; correspondingly, some students very near the top end of the B range will get a B+ for the class. The corresponding rule applies at the bottom end of the B range, and at the top and bottom ends of the C range.

In a class this size, it is inevitable that some (maybe many) students have scores that place them very near a grade cutoff. For such students, a grading system without the plus/minus option meant that a single test question would spell the difference between getting (for example) a B or a C. Now, that single test question will probably only differentiate between a B– and C+, a distinction that seems far more appropriate. [As you probably know, plus/minus grades are used in computing UGA grade point averages, but only the A, B, etc., part of the grade matters for the calculation of HOPE eligibility.]

If you have any special problems, such as a potential “incomplete” grade for the semester, you may wish to contact the Office of the Vice President for Student Affairs at 542-3564.

**Study Guide:** Another class resource is available through the UGA Library: the *Study Guide* (written by Edward Scahill) that accompanies the Hubbard and O'Brien book. Since this book is *not required* for the class, it's not available at the book store. For those of you do who wish to look

at the *Study Guide*, a copy is available at the Library Reserve Desk. If, after inspecting the *Study Guide*, you decide that you'd like to have your own copy, let Prof. Trandel know, and a book may be made available for you to purchase.

**Relationship Between Lectures and Text:** In this class, the lectures, the reading assignments, and the web activities are designed to complement each other. In order to get the full benefit of this class, therefore, you must attend lecture, read the textbook, do the homework, read the outside readings, and participate in the experiment.

The exams in this class reflect the fact that these materials are not perfect substitutes. While many of the test questions will be based on material that is covered both in class and in Hubbard and O'Brien, some questions will be based on lecture material that is not found in the other sources. On the other hand, some questions (no more than one or two per exam) may cover topics discussed in the text or in the readings, but not in class. I do not record attendance in this class, but this section should make clear that if you fail to attend lecture on a regular basis your performance in (and your grade for) the class will be seriously affected.

**Academic Honesty:** As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty", and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at: <http://www.uga.edu/honesty/>.

Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor.

**A Note About The Class:** Some of you may be a bit worried about this class. You may have heard that Economics 2106 is a hard class, or that the topics in it are abstract or difficult to understand.

Obviously, I feel that there is great value in learning the concepts of economics and the economic way of thinking. Part of the goal of this class is to help you understand various aspects of the world around you. Throughout the semester, I will try to emphasize how our classroom material explains features of the outside world. If I don't do enough of this, challenge me on it — feel free to ask why any particular topic "matters".

Many students find ECON 2106 to be a challenging course. I'll simply note here that microeconomics requires much more than good memorization skills. To do well in this class, you'll have to *analyze* events. I'll provide examples designed to get you started thinking in this way.

**Classroom Behavior:** As noted above, I do not record attendance in this class; therefore, no student is "forced" to be present in this classroom. I ask those of you who choose to attend class to be considerate of those around you. In particular — for the benefit of your classmates who are working hard to understand and appreciate the class material — please refrain from any actions (including talking among yourselves, reading the newspaper, surfing the web, etc.) that might distract those in your vicinity.

**Keeping Up To Date:** I know you hear this all the time, but I'll repeat it anyway — it's important that you keep up in this class. Economics builds on itself. Many concepts are used repeatedly. However, we'll study those concepts intensely only when they are first introduced. After that, I'll feel free to use the concepts without reexplaining them. As a result, if you do not understand the early parts of the course, you may have a great deal of trouble later on. The best way to prevent this is to make sure that you do not fall behind: come to class, read the assignments, and come to see me or the TA if you are having trouble.

On a related issue, please feel free to ask questions during lecture. This is a large class, and that sometimes makes it difficult to speak up. However, I need to know when I am going too fast or not being clear. Please ask questions — you will be performing a service for yourself, for your classmates, and for me.

## Class Schedule

We should cover all the topics listed on the following schedule, although we may not cover them on the dates indicated. Whether we get ahead of schedule or fall behind, however, the in-class exams will be given on the dates indicated. Each exam will cover whatever material is actually discussed in class on the dates given below (and, of course, the appropriate homeworks and reading assignments).

Date	Topic	Assignment
M, Aug. 17	Introduction; Marginal Analysis	ch. 1
W, Aug. 19	Opportunity Cost; Gains From Trade	ch. 2
F, Aug. 21	Demand; Change in Quantity Demanded	pp. 319–320, 322, 66–70, 294–297
M, Aug. 24	Change in Demand; Consumer Surplus	pp. 70–75, 100–103
W, Aug. 26	<b>Aplia Experiments:</b> <i>Equilibrium Price and Quantity and Price Ceilings and Floors</i>	
F, Aug. 28	Supply Curve; Moving Along vs. Shifting; start Supply and Demand Analysis	pp. 75–97
M, Aug. 31	finish Supply and Demand Analysis	same
W, Sept. 2	Commodity Tax; Producer Surplus; Market Efficiency <b>(HMWK #1 Due)</b>	pp. 115–121, 103–107, 124
F, Sept. 4	catch up; discuss homework; prepare for exam	
W, Sept. 9	<b>EXAM I</b> (covering Aug. 17 – Sept. 4)	
F, Sept. 11	Restrictions on Markets; review exam	pp. 98–99, 107–115, 122–130
M, Sept. 14	finish Restrictions on Markets	same
W, Sept. 16	start Elasticity	ch. 6
F, Sept. 18	finish Elasticity	same
M, Sept. 21	Economic Cost; start Firm Production Costs	ch. 10
W, Sept. 23	finish Production Costs; Marginal Utility; Behavioral Economics	pp. 284–287, pp. 298–311
F, Sept. 25	Firm Revenue; Profit Maximization; Profit Measurement <b>(HMWK #2 Due)</b>	pp. 376–390
M, Sept. 28	catch up; discuss homework; prepare for exam	
W, Sept. 30	<b>EXAM II</b> (covering Sept. 11 – Sept. 28)	

<b>Date</b>	<b>Topic</b>	<b>Assignment</b>
F, Oct. 2	Shut Down Decision; Supply Curve; Competition in the Short Run; review exam	pp. 390–393
M, Oct. 5	Markets in the Long Run	pp. 393–409
W, Oct. 7	Market Efficiency	same
F, Oct. 9	Downward-Sloping Firm Demand; Marginal Revenue; Price Setting	pp. 410–417
M, Oct. 12	Monopolistic Competition	pp. 417–438
W, Oct. 14	Monopoly	ch. 14
F, Oct. 16	Pricing; Price Differentiation	ch. 15
M, Oct. 19	Oligopoly; Game Theory; Nash Equilibrium <b>(HMWK #3 Due)</b>	pp. 440-454
W, Oct. 21	catch up; discuss homework; prepare for exam <i>(Note: Thurs., Oct. 22nd is Withdrawal deadline)</i>	
F, Oct. 23	<b>EXAM III</b> (covering Oct. 2 – Oct. 21)	
M, Oct. 26	Prisoner’s Dilemma; review exam	pp. 457–470
M, Nov. 2	Chicken Game; Externalities and Inefficiency	pp. 136–141
W, Nov. 4	Externalities; start Environmental Policy	pp. 141–152
F, Nov. 6	finish Environmental Policy	same
M, Nov. 9	Public Goods	pp. 152–171
W, Nov. 11	Input Markets; Labor Markets <b>(First ESSAY Due)</b>	pp. 534–556
F, Nov. 13	International Trade; Protectionism <b>(HMWK #4 Due)</b>	ch. 8
M, Nov. 16	catch up; discuss homework; prepare for exam	
W, Nov. 18	<b>EXAM IV</b> (covering Oct. 26 – Nov. 16)	
F, Nov. 20	Economics of Information; review exam	ch. 17
M, Nov. 30	Adverse Selection; Moral Hazard; Signaling and Screening <b>(Second ESSAY Due)</b>	same
W, Dec. 2	Simple Economics of Health Care	none
F, Dec. 4	Microeconomics of the Financial Crisis	none
M, Dec. 7	Government Behavior	pp. 598–604
Tu, Dec. 8	opportunity to review exams I-IV	
M, Dec. 14	Comprehensive <b>FINAL EXAM</b> — 12:00 noon	

**Semester Schedule Notes:** The following dates are scheduled off days for the entire university: Monday, September 7th (Labor Day), Friday, October 30th (“Fall Break”), and Monday–Friday, November 23rd–27th (Thanksgiving Break). Finally, note that this class will meet (by UGA rule) on *Tuesday*, December 8th (this is to even out the number of class hours for M-W-F classes and Tu-Th classes).

**Interested in Economics?** If so, I’d like to offer three suggestions. First, consider becoming an econ major. Feel free to talk to me about this possibility.

Second, the class web page will soon contain links to a number of books (*not* textbooks) at which you might want to look. These books (many written by distinguished economists) are meant for general audiences, and those listed will represent a variety of views about how the world works.

Third, for those who enjoy reading weblogs, links to some sites that feature economic analysis (in some cases, along with other topics) will soon be posted on the class web page. Links to other sites with econ-related materials (at a level appropriate for undergrads) may also be posted.