Learning Objectives

This course is designed to develop your ability to use economic concepts to analyze and evaluate the effects of public policy. This course will review and further develop concepts that you have already encountered in your earlier microeconomic theory course in addition to introducing new concepts and providing a variety of policy applications. As a result of taking the course students should master three learning objectives:

1. Reinforce and extend previous knowledge of the basic tools and concepts of intermediate microeconomic analysis and welfare economics;
2. Learn how to use the formal economic journal literature to research and understand the economic issues of selected public policies;
3. Learn how to write an economic analysis of a particular public policy.

Expected minimum time requirements

In accordance with GW policy and federal regulations, this three-credit course is expected to require a minimum of 112.5 hours of work (average of 7.5 hours per week over the 15 week semester). Class sessions are 2 hours (110-120 minutes) per week. Most of the time will be required for the extensive assigned reading, work on problem sets, preparation for the presentation of an article to the class, preparation for and taking the quizzes and the exam, and the preparation of the final paper. The specified minimum of 112.5 hours is the standard level for three-credit courses but most students find this course harder than average and should expect to spend the necessary additional time to master the material and prepare a high quality paper. Students with incomplete knowledge of the prerequisite intermediate microeconomics and/or students who lack the
expected level of math proficiency should expect to spend additional time early in the semester to fully develop the skills assumed for this course.

**Prerequisites**

Students in this course should have completed either PPPA 6017 (previously known as PPPA 6085) or Economics 6217 or a comparable course in intermediate microeconomic theory. PPPA 6003 (the MPA economics course) is an acceptable prerequisite course, but it does not develop the technical detail and problem practice that PPPA 6017 does. Students with PPPA 6003 as their economic background should expect to work extra problems and carefully develop their knowledge of the portions of the textbook marked as review. Students with limited background in economics may find it useful to work some or all of Prof. Brooks’ PPPA 6017 problems. Assignments for that course are available at [http://www.leahbrooks.org/leahweb/teaching/pppa6017/2016/subpages/handouts.html](http://www.leahbrooks.org/leahweb/teaching/pppa6017/2016/subpages/handouts.html).

Some students have also found it useful to explore the MIT Principles of Microeconomics course available on MIT's open courseware (see [http://ocw.mit.edu/courses/economics/14-01sc-principles-of-microeconomics-fall-2011/](http://ocw.mit.edu/courses/economics/14-01sc-principles-of-microeconomics-fall-2011/)). While that course is designed as a “principles” rather than an “intermediate theory” course, it covers the relevant material in considerable detail and contains video lectures for the primary course material and for working out sample problems. Because that course is designed for MIT students, it uses more math than is required for this course.

All students should take the “Initial Assessment” test found in the “Testing” section of the Blackboard site for this course as soon as feasible and preferably before the first class session. Your score on this test does not count toward your grade, but you should take it seriously and review the relevant material in your textbook or previous course notes as necessary while you take the test. You should use your results to guide your efforts in the early part of the course. If you score less than 50 percent, you probably don't belong in this course and you should either drop the course or discuss with me why you think you will be able to successfully complete the course. If you score between 50 and 75 percent, you should plan on exerting extra effort on the review section at the beginning of this course in order to prepare yourself for the more complex material later in the course. If you score 75 percent or above, you should be adequately prepared for this course.

This course does not require calculus but it does require a good understanding of algebraic manipulation at the level typically taught to college bound students in U.S. high schools. While students in this course have almost always been taught the relevant mathematical skills, those who have not used those skills in recent years may need some review to avoid making mathematical errors when working out the answers to economics problems. If you need to refresh your math skills, you should obtain a textbook for a college algebra or precalculus mathematics course or use online materials and courseware to improve your math skills early in the semester. You may find it helpful to use the math review materials posted by Prof. Brooks for PPPA 6017 (the standard prerequisite course for this one) at [http://leahbrooks.org/leahweb/teaching/pppa6017/2016/subpages/resources.html](http://leahbrooks.org/leahweb/teaching/pppa6017/2016/subpages/resources.html). You may also use Prof. Augustine’s math review material for incoming Trachtenberg School
students which is posted in this course’s Syllabus section of Blackboard. In particular, many students need to refresh their understanding of exponential and logarithmic functions. One convenient method to review that material is to use the free online Khan Academy lessons. See the lessons on exponential growth and decay (https://www.khanacademy.org/math/algebra2/exponential-growth-and-decay-alg-2) and the lessons on exponential and logarithmic functions (https://www.khanacademy.org/math/algebra2/exponential-and-logarithmic-functions), and any other math topics which you need to review.

**Required Textbook (Choice of one)**


**Recommended Second Textbook**


**Optional Supplementary Book**


**Note on Readings:**

You should choose either the Pindyck and Rubinfeld textbook (abbreviated as P&R in the assignments) OR the Goolsbee, Levitt, and Syverson (abbreviated as GLS in the assignments) textbook. Both books cover substantially the same material and if you already have one of them from your previous microeconomic theory course there is no need to purchase the other one. I have assigned the current 8th edition of the P&R book but you are also welcome to use the 2009 7th edition which you may find more easily available and/or cheaper if you are purchasing a used book. In the rare cases in which section numbering has changed between the editions, I have included the relevant 7th edition numbering in the assignments below. Both books contain substantially more material than can be reasonably mastered in a one-semester course. In this course, you will carefully read sections of the book that you probably did not cover in detail (if at all) in your earlier course and will also review chapters that cover topics that I assume you have studied earlier. This course is not closely tied to the textbook and if you have a different intermediate microeconomic theory textbook you are welcome to use that as a substitute but you are responsible for finding the relevant sections that correspond to the textbook assignments.

The (recommended, not required) Weimer and Vining (abbreviated as WV in the
assignments) is a very useful supplement that emphasizes the use of economics in policy analysis. I have assigned the current 5th edition, but you are welcome to use an older edition if you have one available. There are only minor changes between the 4th edition of 2005 and the 5th edition of 2011. The Weimer and Vining discussion is clear and directly related to policy analysis, but does not provide the level of technical detail that is needed in this course. You may find it useful to read the Weimer and Vining sections as an introduction to the more detailed treatment in the textbook and to introduce some policy applications of the material.

The optional Marshall Jevons book covers considerable economics in the form of a murder mystery without graphs or equations. Marshall Jevons is the pen name for fiction written by the popular University of Virginia economics professor Kenneth Elzinga. The book is optional but it is an easy read, costs only $5.99 in the Kindle edition, and shows a policy application (solving a crime) outside of the normal range of applications that we will consider in this class.

Much of the required reading for this course is in the form of journal articles. Required readings that are not included in the textbook will be made available through Blackboard. I will also use Blackboard to communicate with the class. Each student must have a gwu.edu e-mail address because Blackboard only recognizes those addresses.

**Course Requirements**

I am trying to develop two distinct types of skill in this course: (1) skill in using economic tools to derive precise answers to clearly defined problems; (2) skill in applying economic reasoning to illuminate poorly defined or complex policy problems. The development of both skills requires extensive practice. The first skill will be developed through problems that require you to work out specific answers to precisely defined problems. I will assign four problem sets that everyone should complete and additional problems as necessary for those who need more practice. I encourage you to work together in groups to develop answers to the problem sets. Students who have limited background in economics will need more practice on problems than is provided by the problem sets that I assign to the whole class. There are many additional problems in the textbook and you should be sure that you get adequate practice to master the material.

Your ability to derive precise answers to clearly defined problems will be evaluated by the four quizzes and by an exam. The quizzes and exam will be open book, but must be completed individually without collaboration with others. The problem sets will not be collected or graded, but each of the four problems sets will be followed by a quiz (to be taken online through Blackboard) that is closely related to the problem set. The quizzes are designed so that you can get the correct answers easily if you have carefully worked out the answers to the problem set but they may appear difficult if you have ignored the problem set. On quiz weeks, the quiz will be made available at noon on Friday and is due at noon on Tuesday. You may choose any two-hour window within that period to complete your quiz. The Tuesday noon due date is a hard deadline and you will not have an opportunity to take the quiz late.
The second skill requires analysis and synthesis of diffuse and sometimes contradictory material and is best developed and evaluated through reading journal articles and researching and writing your own analysis. An important part of this course is developing skill in using the formal economic literature. Each student will present an introduction to one of the assigned journal articles to the class. In most cases, two students will be assigned to an article and they will work together to prepare a coherent joint presentation. The introduction will normally include the key points of the article, the economic concepts or models used in the article, and some evaluation of how the insights provided in the article could be used in a policy analysis. You should provide a written record of your presentation. If you prepare PowerPoint slides for your presentation, you may turn those in as your written record. If you do not use slides for your presentation, you should prepare a two to three page (double spaced, 12 point type) written analysis of the article covering the same issues that you choose for your oral presentation.

Your ability to apply economic reasoning to illuminate policy problems will be evaluated by the preparation a paper. The paper should be approximately ten pages long (double spaced, 12 point type) and is due on Dec. 11. Although the paper is primarily planned as an individual project, two students may choose to work together to produce a longer more sophisticated joint paper. See the separate paper description for more details on my expectations regarding the paper.

This class will be a mixture of lecture, discussion, and problem solving. It is important that you attend all classes, arrive on time, and read the assigned material before class so that you may contribute your insights to the class discussion and learn from the insights of other students. If you must miss a class, you should send me an email in advance of the class to let me know that you will be absent.

You are, of course, responsible for following GW’s Code of Academic Integrity and all other relevant policies and regulations of the university, CCAS, and the Trachtenberg School. Please note that the CCAS policy regarding the grade of incomplete is quite restrictive and that consequently I only assign a grade of “I” in exceptional circumstances. The appendix to this syllabus summarizes the policies that apply to all Trachtenberg School courses.

GRADING

Course grades will be computed by dropping your lowest quiz grade and weighting the other three at 5% each for a total of 15%, the exam at 35%, your journal article presentation at 10%, and the paper at 40%. Numerical course grades will be translated into letter grades using the following scale: 90-100 = A; 85-89.9 = A-; 80-84.9 = B+; 75-79.9 = B; 70-74.9 = B-. I may modify the grading scale slightly but will not change it substantially. While the median grade in the course is normally an A-, there is often a tail that extends down into the C range. If you find yourself struggling with the material, see me to discuss ways to improve your understanding, or if necessary to drop the course, before too late in the semester. **Please note:** Timing is important in this class. The quizzes and exam must be completed by the specified times in order to receive credit. Late papers will be assessed a five point penalty for each late day. Thus a paper that would receive an A- if turned in on time will receive a B+ if turned in one day late, a
B if turned in two days late, and a B- if turned in three days late (unless you receive an extension approved in advance by the instructor for good cause). Papers more than three days late will not be accepted.

COURSE OUTLINE AND SCHEDULE

I expect to cover the same material in both sections each week and if you are unable to attend your section for a particular week you should attend the other section if that is feasible for you and if there is space available. You should send me an email if you want to attend a section other than the one for which you are registered. The schedule below is my current plan for the course. I may make minor modifications to the schedule or to assigned readings as the course proceeds. The only scheduled interruption to consecutive class meetings is the GW Thanksgiving Break (Nov. 22-25). Occasionally severe weather causes an unplanned interruption in the schedule. If the weather makes class questionable, check the university status at the GW advisories web site (http://CampusAdvisories.gwu.edu/). You should also be signed up for the GW Alert system and that should provide you with a message if the university is closing. If severe weather makes the regular class session infeasible, I will plan to hold the class session online using Blackboard Collaborate.

Part I: Review of Neoclassical Microeconomic Theory

   Review P&R, chapters 1-4, 6, and 7 or GLS, chapters 1-7 with particular attention to elasticity, supply-demand equilibrium, price indices, production functions, and types of costs including private and social opportunity costs. [Mathematical appendices are not assigned but may be a simpler way of understanding the material for those with adequate mathematical background.]
   Complete the “Initial Assessment” in the Testing section of Blackboard.
   Complete the assignment “Student Information Form” in the Assignments section of Blackboard.

2. Sept 6-7 – Consumer Choice, Production, and Price Indices Part II
   Finish reviewing the material assigned for first week.
   CBO, “Using a Different Measure of Inflation for Indexing Federal Programs and the Tax Code,” (Feb., 2010).

3. Sept 13-14 – Competitive and Monopoly Equilibrium and Efficiency
   Review P&R, chapters 8, 9, 10.1-10.4, 11.1-11.4 or GLS, chapters 8, 9, 10.1-10.4
   Optional: WV, Chapter 4.

Part II: Policy Analysis with Bounded Rationality and Limited Information

4. Sept 20-21 – Institutions to Facilitate Non-Optimizing Decisions
Oliver Williamson, “Transaction Cost Economics: The Natural Progression,” 
*American Economic Review* June, 2010 (Nobel lecture). [Sections I, IV, and V are assigned and the remainder is optional.]

**Quiz 1 due at noon on Tuesday, Sept. 26**

5. Sept 27-28 - Asymmetric Information and Insurance

   P&R, 5.1-5.5 (5.1-5.4 in 7th ed. plus new section 5.5 from 8th ed.) and 17.1-17.5 or GLS 13.5 and 15.


6. Oct 4-5 – Behavioral Economics

   P&R, section 5.6 (5.5 in 7th ed.) or GLS 17.1-17.2.


7. Oct 11-12 – Policy Implications of Behavioral Economics


**Quiz 2 due at noon on Tuesday, Oct. 17**

8. Oct 18-19 – Private Decisions over Time


   Benartzi and Thaler: “Save More Tomorrow: Using Behavioral Economics to Increase Saving,” *Journal of Political Economy*, 2004. [Sections 1-3 and 5 are assigned and remainder of the article is optional.]

   A. Lusardi and O. Mitchell, “The Economic Importance of Financial Literacy: Theory and Evidence,” *Journal of Economic Literature* 2014, 52(1): 5-44. [Sections 3-5, pp. 10-29 are assigned and the remainder of article is optional.]
“The 2016 Annual Report of the Board of Trustees of the Federal Old-age and Survivors Insurance and Federal Disability Insurance Trust Funds,” [Introduction and Overview sections are assigned; remainder of report optional.]

10. Nov 1-2 – Focus on Papers
Read the paper guidelines
Read at least three of the posted sample papers

Quiz 3 due at noon on Tuesday, Nov. 7

Part III: Policies for Externalities and Common Property Resources

11. Nov 8-9 – Externalities and Market-based Controls
Review P&R, chapter 18 or GLS, chapter 16.

Paper topic and description due Tuesday, Nov. 14 (submit through Blackboard)

12. Nov 15-16 - Commons Management
Elinor Ostrom, “Beyond Markets and States: Polycentric Governance of Complex Economic Systems,” AER June, 2010 (Nobel lecture). [Sections 1, 2, 4, 6, 8 assigned and the remainder is optional.]

Quiz 4 due at noon on Tuesday, Nov. 21

[No class Nov. 22-23 – Thanksgiving Break]
13. Nov 29-30 – Global Environmental Problems
   Donald Marron and Eric Toder, “Tax Policy Issues in Designing a Carbon Tax,”
   AER, May 2014, 563-568.
   Gary Libecap, “Addressing Global Environmental Externalities: Transaction
   Costs Considerations,” Journal of Economic Literature 2014, 52(2), 424-479.
   [Sections 1 and 4 are assigned and remainder of article is optional.]

14. Dec 6-7– Work on Papers - No regular class meeting
   [Optional review session for exam at scheduled Dec. 7 meeting time]

   FINAL PAPER DUE – Monday, Dec. 11 at noon
   Exam available on Blackboard at noon on Wednesday, Dec. 13
   EXAM DUE ON BLACKBOARD – Tuesday, Dec. 19 at noon

UNIVERSITY AND TRACHTENBERG SCHOOL CLASS POLICIES

Trachtenberg School Civility Statement

Higher education works best when it becomes a vigorous and lively marketplace of ideas in which all points of view are heard. Free expression in the classroom is an integral part of this process. At the same time, higher education works best when all of us approach the enterprise with empathy and respect for others, irrespective of their ideology, political views, or identity. We value civility because that is the kind of community we want, and we care for it because civility permits intellectual exploration and growth.

University policy on observance of religious holidays

In accordance with University policy, students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance. For details and policy, see: students.gwu.edu/accommodations-religious-holidays.

Academic integrity code

Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information. For details and complete code, see: studentconduct.gwu.edu/code-academic-integrity

Safety and security

In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building.
After evacuation, seek shelter at a predetermined rendezvous location.

**Support for students outside the classroom**

**Disability Support Services (DSS)**

Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Rome Hall, Suite 102, to establish eligibility and to coordinate reasonable accommodations. For additional information see: disabilitysupport.gwu.edu/

**Mental Health Services 202-994-5300**

The University's Mental Health Services offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include: crisis and emergency mental health consultations confidential assessment, counseling services (individual and small group), and referrals. For additional information see: counselingcenter.gwu.edu/

**Additional Trachtenberg School Policies**

1. **Incompletes:** A student must consult with the instructor to obtain a grade of I (incomplete) no later than the last day of classes in a semester. At that time, the student and instructor will both sign the CCAS contract for incompletes and submit a copy to the School Director. Please consult the TSPPPA Student Handbook or visit http://www.gwu.edu/~ccas/faculty/files/Incomplete_poli0.pdf for the complete CCAS policy on incompletes.

2. **Submission of Written Work Products Outside of the Classroom:** It is the responsibility of the student to ensure that an instructor receives each written assignment. Students can submit written work electronically only with the express permission of the instructor.

3. **Submission of Written Work Products after Due Date:** Policy on Late Work: All work must be turned in by the assigned due date in order to receive full credit for that assignment, unless an exception is expressly made by the instructor.

4. **Academic Honesty:** All examinations, papers, and other graded work products and assignments are to be completed in conformance with the George Washington University Code of Academic Integrity. (see http://www.gwu.edu/~ntegrity/code.html)

   Note especially the definition of plagiarism: “intentionally representing the words, ideas, or sequence of ideas of another as one’s own in any academic exercise; failure to attribute any of the following: quotations, paraphrases, or borrowed information.”
5. **Changing Grades After Completion of Course:** No changes can be made in grades after the conclusion of the semester, other than in cases of clerical error.

6. **The Syllabus:** This syllabus is a guide to the course for the student. Sound educational practice requires flexibility and the instructor may therefore, at her/his discretion, revise content and requirements during the semester.