Spring 2018, online section

RPAD 503

Principles of Public Economics

Market Principles and Market Failures

Instructor: Stephen Weinberg

Credits: 4

Graded: A-E

Format: online

Office Hour:

Tuesdays, 7:35pm-8:35pm, Husted Auditorium (this is immediately after PAD 508)

IMPORTANT: if nobody is there at 7:50, and nobody has emailed me that they are coming, then I will leave. If you want to come later than 7:50, you must notify me that you are coming.

Office Hours are also available by appointment, including skype or phone calls. I am willing to schedule calls on weekends.

We don’t get to have everything we want. That basic truism applies to people and to firms—and it applies even moreso to governments. We have some resources—time, materials, factories, energy, talent, land, etc—and we have some things we’d like—schools with small classrooms, lots of police, medical research, etc. Some firms are better than others at transforming inputs into things we’d like. People differ in what sorts of goods and services they value most, and in their wealth.

Throughout most of the world today, markets play a key role in deciding what goods and services get produced, who produces them, and who consumes them. Few issues resonate in US policy debates as deeply as the question of how well markets serve these roles. PAD/PUB 503 investigates how markets serve these roles, the efficiency and social justice implications of market operations, and the primary rationales for policy interventions in markets. This class explores the economic roots of public finance.

There are many ways we could decide how to allocate resources to different uses. Economics is concerned with
i) The ways that markets (and, in particular, market incentives) allocate resources;
ii) The distributional and justice consequences of these allocations; and
iii) The possible role of government in facilitating and mitigating the market allocations.

The first part of RPAD 503 explores markets and their efficiency at allocating resources, under perfect conditions. The second part of RPAD 503 explores the ways that markets can fail, and possible policies for solving these failures.

Within the context of the MPA core, RPAD 503 is considerably more on the policy side of the spectrum than the management side of the spectrum. RPAD 501 will cover the basics of financial management and budgeting. In this class, we will look at aggregate market behavior by using abstract (yet hopefully illuminating!) models. In other words, this is a crash course on the key issues of microeconomics that permeate public policy and politics.

Students with substantial prior economics background (such as one graduate microeconomics course or three advanced undergraduate microeconomics courses) should confer with Professor Weinberg about possibly waiving RPAD 503.

In RPAD 503, we have two main objectives:

1) to learn key general principles about how economies work, when they work well in terms of efficiency and justice, and when they don’t work well;
2) to apply those general principles to the sorts of specific questions/problems facing civil servants on a daily basis

Competencies

How does RPAD 503 fit into the NASPAA competencies discussed in RPAD 507?

Competency 1: ability to lead and manage in public governance

- We will discuss principles relevant to managing public resources, especially when we discuss “public goods.”

Competency 2: to participate in and contribute to the policy process

- A major course theme is evaluating the strengths and weaknesses of using market and non-market mechanisms to achieve policy goals. We will also practice reading professional economics articles and extracting relevant information from real-world studies.

Competency 3: to analyze, synthesize, think critically, solve problems, and make decisions

- Most of what we do in this course falls into this category. Of the specific items listed in the 507 guidelines, we pay particular attention to
  - Evaluating the equity and efficiency implications of policy options
o Assessing the positive and negative implications of policy options (especially the ways in which policies can incentivize actors to change their behavior)

o Assessing the significance of problems and solutions (especially vis-à-vis market forces)

o Differentiating between short- and long-term problems and solutions (especially the ways that markets evolve over time)

Competency 4: to articulate and apply a public service perspective

- The course will discuss trade-offs of using public and private mechanisms to achieve policy goals
- We will consider the distributional impacts of economic policies across different types of constituents, especially in memo 2.

Competency 5: to communicate and interact productively for a diverse community

- We’re going to make you write some memos. Yay!

Mathematics

The MPA program requires a basic competence in algebra. RPAD 503 is one of the courses that make particular use of this competence. You need to be able to solve problems of the following sort:

1. \[ 2X = 3X + 10 - 2(X-1) \]
2. \[ 3X + 2Y = 7; \ Y = 2X + 14 \]
3. \[ -2 = \frac{15-10}{P-4} \]
4. \[ \frac{1}{3/X} = X \]

You should be able to graph lines in \( Y = a + bX \) form, and to know in a graph what a slope is and what a Y-intercept is.¹

If you would like to review this material, you might consider the math refresher recommended for Welcome Week: Bleau, Clemens, and Clemens (2013), *Forgotten Algebra*, 4th edition, isbn 1438001509

¹ Solutions: 1. \( X=12 \); 2. \( X = -3 \); \( Y = 8 \); 3. \( P=3 \); 4. \( X=\sqrt{3} \). The slope is \( b \); the Y-intercept is \( a \); you should understand that the slope is the change in Y over the change in X, and that the Y-intercept is the value of the function when \( X = 0 \), that is, the starting point when you draw a line.
While the tone is aimed at a younger demographic, you may also find helpful the Khan Academy’s online videos about solving equations https://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-solving-equations and solving systems of equations https://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-systems-topic. Khan shows you several methods for solving systems of equations. We will use the “substitution” method in class, and that method is by far the easiest one for the problems of taxes and on externalities.

For a less thorough but less cute video of examples, see http://www.youtube.com/watch?v=cwHR_B9zK7k
Readings


Some materials will be posted to blackboard.

Professional articles are available for full-text download through the SUNY library website (go through the Journal Finder, not the normal catalog), unless otherwise specified. **ALL professional readings will be available on-line. If you think a reading is NOT available, e-mail Professor Weinberg.** Do NOT try to find a different version of the article. **Do NOT use google to locate journal articles!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!** If you find an article with the same name by the same authors, but not the specified version, then you may well have the wrong draft.100

Note: the library’s e-Journals tab can often find things that EBSCO cannot. Learn how to use it. Note that with the e-Journals tab you search for the journal, such as *American Economic Review*. Once you’ve entered the database for the journal you need, you can search or browse to the specific article you need.

Grading

15% Discussion Boards

12% Online quizzes

28% Problem Sets (7% each)

7% Midterm Problem Set

14% Memos (7% each)

24% Final Exam
Office Hours

While I prefer for local students to come to my regular in-person office hours, I am happy to schedule appointments and skype calls if you cannot come at that time. Let me rephrase: I expect and encourage you to schedule appointments if you cannot come at that time. You must e-mail me (sweinberg@albany.edu) to schedule an appointment.

Assignments

Discussion Boards

You will be assigned to a discussion team to talk through various questions each week. There will generally be a problem-set-type problem and a qualitative discussion question. You must post an initial response to the prompt, usually by the Tuesday of each week, and post at least two additional posts by the Saturday of the week. You will be letter graded on your participation.

Online Quizzes

These are meant to give you a chance to get some immediate feedback on your understanding of the content each week. There will be a 20-minute quiz each week on the readings and online videos, focusing on reading comprehension and the ability to solve problems. Quizzes will generally be due on the Thursday of the week.

Individual Problem Sets and Team Problem Sets

There will be 3 individual problem sets over the course of the term, not counting the special midterm problem set; we will drop the lowest of these. There will be 2 team problem sets, which will not be dropped. Problem sets are algebra-intensive.

Problem set questions will often require you to go beyond merely reproducing the types of problems solved in the book or the videos.

You should expect to spend 10-14 hours or so per problem set.

Problem Sets are generally due on either Saturday or Monday.
Midterm Problem Set

There will be a no-collaboration midterm (effectively, a cumulative problem set) due on March 1. This marks the point when we have finished building the fundamental tools of the course; if you cannot solve the problems that we have developed to this point, then you will find the subsequent material impossible. Since this is the same length as a regular problem set, we will still cover new material that week and have a discussion board, but no quiz.

Memos

There will be two short analysis memos, in which you discuss how to apply course principles to specific cases. These memos will take a somewhat different form and length than the decision memos assigned in 507. They are, unsurprisingly, closer in style to the memo for 508. Funny, that.

Final Exam

There will be a 2-hour final exam during exam week. You have four options for how to take it.

a) Come in person on the evening of Monday, May 14, to a proctored exam
b) Come in person on the evening of Tuesday, May 15, to a proctored exam
c) Make alternate arrangements with me for a standard proctored exam on May 14 or 15. For example, I could imagine arranging for you to take the exam with a professor at a different campus. If you want to use this option, please open discussions with me at the beginning of the term, so that we can figure out if an arrangement is possible before the March 1 deadline to register for proctoru.
d) Take the exam online on May 14 or 15 using proctoru. This service costs $19.75 and requires you to have a Mac or PC with a web camera and microphone. (Mobile devices won’t suffice.) An online proctor will watch you through your webcam and screen capture technology to make sure you aren’t cheating. You can see technical requirements at https://www.proctoru.com/tech-requirements/ and a video at https://www.proctoru.com/pre-exam-checklist/. If you want to use this option, you must notify me by March 1 so that I can make the arrangements. This is a firm deadline.

Collaboration on Problem Sets and Memos

Some assignments are team assignments, which you will do in teams that I will assign. I am assigning team problem sets for two reasons: (1) to encourage you to discuss the course material with classmates and (2) to encourage networking. I also strongly encourage you to discuss the individual problem sets and memos with your peers, provided that
a) you attempt every problem on your own before discussing them with colleagues;

b) you write up your own individual assignments from scratch, without looking at your colleagues’ work while you do it; and

c) that you explicitly acknowledge whom you worked with on the first page of the assignment. *Copying a colleague’s work directly is cheating.*

**Grading**

Each assignment will receive a letter grade from A to E. I translate these grades into a 4pt scale, with A = 4.0, A- = 3.66, B+ = 3.33, B = 3.0, B- = 2.66, and so on. At the end of the semester, I take a weighted average of all your grades to get your final score. The translation from this score to a final letter grade is not a matter of simple rounding. The cut-off between an A and an A- is a 3.70. The cut-off between a B and a B- is a 3.00. The cut-offs between an A- and a B+ is a 3.50, between a B+ and a B is a 3.20, and between a B and a B- is 2.95. Hopefully I won’t need to use any grades lower than a B-, but that is up to you….

**Plagiarism and Citations**

I assume you are familiar with American standards regarding plagiarism. You must familiarize yourself with the information at [http://library.albany.edu/usered/plagiarism/index.html](http://library.albany.edu/usered/plagiarism/index.html). Plagiarism is a major offense and can receive severe punishments, from automatically failing the course to being expelled from the program. If in doubt about acceptable use of sources, ask.

Correct citations are one of the more important elements in avoiding plagiarism. When you use a source in a memo, make sure to cite it using any standard academic citational method. (I personally prefer the author-date parenthetical citation method used in economics, but I see no reason to force you to adopt economic norms.) Two things I do care about, no matter which standard you adopt: a) the titles of sources do not belong in the main text of your paper, but rather in the Works Cited page or a footnote, and b) article titles go in quotes; book and journal titles go in italics.

The key to a citation is that the reader must be able easily to track down the source.

Web Citations: It is helpful to the reader to include URLs on the Works Cited page for material located on the internet, assuming that the URL is permanent and that the website is universally accessible. You would NOT provide URLs for published journal articles you have accessed through the library, but you would provide a URL for a government report or for a working paper downloaded from an author’s website. Some conventions call for including the
date you accessed internet materials; these conventions are necessary in increasingly rare circumstances. There is a distinction between material that exists in a final, dated form that happens to be located on the internet and material from fluid web sites. If something is fixed, such as a journal article, dated working paper, or government report, then you do NOT need to report the date you accessed the information; simply report the date of the document itself. If something could be changed at any moment, then you must report the date you accessed the website.

Grammar Help

For the individual assignments, you should feel free to seek help in proof-reading your drafts, provided that a) you make all changes yourself, and b) you acknowledge any such help explicitly on the first page of your assignment.

Incidentally, I find the Grammar Girl blog to be a useful resource: http://grammar.quickanddirtytips.com/.

Web Videos

A substantial part of the course material will be presented in the form of web videos. Some videos present conceptual material, and other videos provide examples of solving problems. I typically work each problem twice, once quickly and then once more slowly.

Please have a calculator with a square root button handy while watching the problem-based videos. You will get vastly more out of them if you attempt the problems on your own before watching the solutions.
Schedule

Note: UM refers to the University of Minnesota textbook; CI refers to Curtis and Irvine. (See above.)

All due dates refer to midnight on the day in question.

Section I: Markets in a Perfect World

Week of Jan 22: Managing Limited Resources

- Cummings, Holt, and Laury, 2003, “Using Laboratory Experiments for Policy Making: an Example from the Georgia Irrigation Reduction Auction,” Andrew Young School of Policy Studies Research Paper Series No. 06-14, posted to blackboard
- Reading Guide to Cummings et al, available on course blackboard page
  a. Jan 24: Introductory discussion board post due
  b. Jan 25: first post due on discussion board 1
  c. Jan 26: Math assessment quiz (graded solely on completion)
  d. Jan 27: discussion board 1 closes

Week of Jan 29: Markets and Elasticities

- UM chapters 3, 4, 5²

² NOTE WELL: in PAD 503, we are using a slightly simpler version of the elasticity formula reported in the book. The book’s version (which is known as “the midpoint method”) takes a few more steps to solve than our method (“the startpoint method”). In practice, economists calculate elasticities using calculus tricks that render these two methods equivalent, so I see no reason to make you do the more tedious version. We are thus replacing the book’s equations as follows:

Equation 5.1: \[ \eta = \frac{\% \Delta Y}{\% \Delta X} = \frac{Y' - Y}{\frac{Y}{X' - X}} \]

Equation 5.3: \[ \eta_D = \frac{\% \Delta Q}{\% \Delta P} = \frac{Q}{\Delta P} \]
• Recommended: if you are finding the graphs difficult, see UM appendix A.1
  a. Jan 30: first post due for discussion board 2
  b. Feb 1: quiz 1 due
  c. Feb 3: discussion board 2 closes

Week of Feb 5: Efficiency and Government Distortions of Markets

• CI 5.1-5.4
• UM 6.1-6.2, UM 15.2
• Handout on Tax Wedges and Total Surplus
  a. Feb 6: first post due on discussion board 3
  b. Feb 8: Quiz 2 due
  c. Feb 10: discussion board 3 closes
  d. Feb 10: problem set 1 due (individual)

Week of February 12: Production Costs I

• CI 8.4-8.5
• UM 8.1 (skip everything about factors of production and the marginal product of labor; we will start with the section titled “Costs in the Short Run”)
• KSG Case 1273.0: Casco Bay’s Ferries
  a. Feb 13: first post due in discussion board 4
  b. Feb 15: quiz 3 due
  c. Feb 17: discussion board 4 closes

Week of Feb 19: Production Costs II

• Handout on Production in the Longrun
  a. Feb 20: first post due in discussion board 5
  b. Feb 22: quiz 4 due
  c. Feb 24: discussion board 5 closes
  d. Feb 24: problem set 2 due (team problem set, cannot be dropped)
Week of February 26: Poverty and Inequality

- UM ch19
  a. Feb 27: first post due for discussion board 6
  b. Mar 1: Midterm Problem Set Due
  c. NO QUIZ
  d. Mar 3: discussion board 6 closes

**MARCH 1: students who wish to take the final exam online through proctoru must notify Professor Weinberg by this date so that he can make arrangements.**

Week of March 5: Regression; Economic Justice

- KSG Case 1328.0: “A Money-Losing Public Monopoly Faces a Competitive Threat: the New York City Transit Authority and the ‘Dollar Vans’”
  a. Mar 6: first post due for discussion board 7
  b. Mar 8: Quiz 5 due
  c. Mar 9: discussion board 7 closes, on FRIDAY this week

Week of March 12: SPRING BREAK

Week of March 19: Market Power

- UM ch10
- C1 ch10.1-10.2, 10.5
  a. Mar 20: first post due for discussion board 8
     (Discussion board 8 consists of working on memo 1 together)
  b. Mar 22: quiz 6 due
  c. Mar 24: discussion board 8 closes
Week of March 26: Externalities

- UM 6.3
- Handout on Externalities
  a. March 26: Memo 1 due
  b. NO discussion board this week
  c. March 29: quiz 7 due

Week of April 2: Policy Approaches to Externalities: Pollution Control

- UM ch18
- KSG Case 1514, “Cleaning up the ‘Big Dirtsies’: the Problem of Acid Rain,” pp1-6, plus the section “Greens Eye the Market” (pp9-11)
- Mankiw, “Smart Taxes: an Open Invitation to Join the Pigou Club,”
  http://www.economics.harvard.edu/faculty/mankiw/files/Smart%20Taxes.pdf, skip “Related Externalities” and “Energy Independence” (pp19-21)
  a. April 2: problem set 3 due (yes, on a Monday; I wanted you to have the weekend to do Memo 1, and that pushes things back)
  b. April 3: first post due for discussion board 10
  c. April 5: NO quiz this week
  d. April 7: discussion board 10 closes
Week of April 9: Public Goods


- Handout on Present Discounted Value
  a. April 10: first post due for discussion board 11
  b. April 12: quiz 8 due
  c. April 14: discussion board 11 closes

Week of April 16: Asymmetric Information

- Readings TBD
  a. April 16: Memo 2 due
  b. April 17: first post due for discussion board 12
  c. April 19: quiz 9 due
  d. April 21: discussion board 12 closes

Week of April 23: Information Elicitation


³ The Free Rider article discusses how the concept can be related to the term “prisoner’s dilemma.” We haven’t studied that term, but the article doesn’t actually assume that you know the term. I think this section works fine even if you disregard the term and simply read the example.

  a. April 23: problem set 4 due (team, cannot be dropped)
  b. April 24: first post due for discussion board 13
  c. NO QUIZ
  d. April 28: discussion board 13 closes

Week of April 30: Markets or Government?

• Roberts, *The Price of Everything* (chapters 1-6)

  a. May 1: first post due for discussion board 14
  b. May 3: quiz 11 due
  c. May 5: discussion board 14 closes

Week of May 7: Review

  a. May 7: problem set 5 due
  b. May 8: first post due on discussion board 15
  c. May 9: discussion board 15 closes (only one response is required; posts will be accepted through May 10)
  d. NO QUIZ

Week of May 14: FINAL EXAM

  You may take the exam in one of four ways:
  a. On Monday evening, May 14, with the other section of 503
  b. On Tuesday evening, May 15, proctored by Professor Weinberg
  c. On May 14 or 15 through other arrangements (such as by being proctored by a professor at your home campus if you are not at SUNY Albany)
  d. Electronically through proctoru, fees and equipment required, see the relevant section in the syllabus above; registration for this option is due by March 1