#### **Welcome to Economics 443!**

Economics of Law and Regulation MWF 3:35-4:25 PM 104 Rackley Bldg The Pennsylvania State University

Instructor:
Christopher Paul Steiner
cps17@psu.edu
(Do not use the Angel system;
please e-mail him directly.)
406 Kern Bldg
Office Hours:
MWF 9:45-10:45 AM
or by appointment

Teaching Assistant:
Jorge Soler Lopez
[redacted e-mail address]
(Do not use the Angel system; please e-mail him directly.)
Office hours pending.
Will announce first week of class.

# 1 Course Description

Economics of Law and Regulation looks at the theory behind market breakdowns, where the free market – as described in microeconomic models – does not operate in the most efficient manner. On occasion, we may look at a market that does not operate efficiently *because of* regulation. The bulk of this course is spent describing the theory of firms with market power – and how the United States Federal Government has regulated these markets. In this portion of the course, we will also look at other ways the market breaks down, such as through externalities. In the final portion of the course, we will look at case studies in the United States and describe how regulations have or have not provided a remedy.

From the University Bulletin: "**ECON 443** Economics of Law and Regulation (3) An economic analysis of property rights, contractual arrangements, illegal activities, and regulation; competitive problems due to externalities and market failure."

# 2 Required Textbooks

- 1. Roger Sherman, Market Regulation (1st ed.), 2008
- 2. Nathaniel O. Keohane and Sheila M. Olmstead, Markets and the Environment (2nd ed.), 2007

NOTE: *Market Regulation* is extremely expensive to purchase. The author has, unfortunately, passed away. There are likely no new editions coming out. Because of this, it is pricey to reprint but extremely cheap to rent, particularly from Amazon. You may decide to rent the book and then later purchase it if you think it is worth it.

Although I will be selecting topics, I will be following the book's approach *extremely closely*, so you need to have both books.

# 3 Prerequisites

#### Econ 302 or Econ 342

Note: Since we will be looking at the theory of the firm, the *Market Regulation* textbook uses calculus. (The *Markets and the Environment* textbook is relatively calculus-free and cheap, which is why I chose it for environmental sections and sections where the books overlap.) I will not assume that you have any calculus knowledge at the beginning of the course, since that is not a prerequisite. A few sessions during the quarter will show you how maximization or mathematics works in this context so you can read the book and do homework problems from the book. For the most part, the mathematics done in this course

will not require calculus, but I do expect you to be *extremely* comfortable with *algebra*, the *coordinate plane*, and *graphing* to begin. We will *not be reviewing these concepts*, but we will build from these whenever necessary. Students will not be expected to memorize derivatives – I will provide any marginals on the exam.

# 4 Grading

### 4.1 Point Breakdown

10%: Homework  $(3\frac{1}{3}\%$  each)

30%: Test I 30%: Test II 30%: Test III

#### 4.2 Tests

Tests, including Test III, are *non-cumulative* in spirit, and problems on the test will reflect homework and in-class examples during the relevant time period listed in the syllabus. However, some concepts may build on one another, so it may be necessary to review material from previous sections if that is the case. Test III will be during the final exam period – but, again, will be *non-cumulative* in spirit.

Calculators and notes are *not permitted* during the test, and you will have 45 minutes to finish. Late arrivals must still finish at the time the rest of the class finishes. I will test all answers myself to ensure that computations are straightforward and do not require a calculator.

#### 4.3 Homework

There are three homework sets due during the review sessions for the tests. Solutions will be provided the evening of the due date for the homework through Angel.

You may work together on homework under the following policy: **Each member of the group contributes equally, within their ability, towards the pursuit of the answer.** Straight copying of homework from another person from which you did not *significantly contribute or participate* in coming up with the answer is strictly prohibited.

You are expected to do your own write-up (or type-up, if you struggle with legible handwriting).

# 4.4 Presenting Your Homework: Legible, On-time, Stapled, with Your Name on It

Homework is due by 4:25 PM in 104 Rackley (or where we are meeting that day if moved) on paper, stapled, with your name on the work. Late homework, even late by a second, will be given a 0%. Homework sent through e-mail *on time* will receive a 50 percentage point deduction (an 80% becomes a 30%), with a minimum score of 0%, unless there is a *valid* excuse for missing class and prior arrangements have been made. Of course, late, e-mailed homework is especially egregious and will receive a 0%. Non-stapled or non-named work (if it can be identified) will receive a 5 percentage point deduction (an 80% becomes a 75%), with a minimum score of 0%. Folded corners do not count as staples.

Unless there is a rare exception, the TA or undergraduate grader will be grading work. If they (or I if I am grading) deem the work or portions of it to be illegible, they (respectively, I) have the right to give you no points for the illegible parts.

## 4.5 Regrading Policy

In an effort to promote fairness and avoid on-the-spot requests for re-grades and explanations, I have a written re-grade policy. Should you feel you were graded incorrectly on a test or homework, please download the "Regrade Request Form" from the course website. In a pen color *different* from both what

you <u>and</u> the grader used (I recommend *green!*), circle on your assignment/test where you felt the grader made a mistake. Fill out the form and write out the correct answer for the *entire problem*, even if you only missed part of the problem. Turn the form in, in class, on paper, stapled, with your name on it, by the end of class *one week* after the assignment was handed back to the class at large. If you picked up the assignment *late*, you are still on the class's deadline!

Under no circumstances will there be acceptance of requests for work to be re-evaluated after one week after the assignment or test was handed back to the class *at large*. For Test III, students will have one week after they pick up the test from me to request a re-grade. Grades are final after all assignments and tests are destroyed or in accordance with Penn State policy, whichever is earlier. I will follow Penn State guidelines for the destruction of materials after time has passed.

# 5 Class

## 5.1 In-Class Group Work

During class, I will break up lecture occasionally for group work. Groups are *randomly assigned* at the beginning of the course, and you are expected to work with the assigned group during class. This is designed so that you can meet other peers and that we maximize learning. You, of course, can work with friends on the homework.

I will generally provide answers to the group work in the context of explaining concepts. In-class group work is part of my teaching philosophy, and I take it very seriously.

### 5.2 Missing Class

Attending class is *required*. I have an extensive, extenuating circumstance policy for notification procedures in the "Extensive Attendance Requirement" section.

You do *not* need to notify me for missing a non-test day; however, I cannot provide you with notes – you are responsible for finding a peer to provide you with notes. I am happy to go over missed days with you in non-appointment, regularly scheduled office hours if ideas are still not coherent after you have received the notes *and* read them.

You *must* provide a timely notification with me, along with appropriate documentation, should you need to miss a test *for any reason*.

The University Health System has a few quid-pro-quos about providing excused absences to students. Should you find yourself needing the University Health System during a test, you should read the quid-pro-quos.

Unless there are extenuating, excused circumstances as defined in the "Extensive Attendance Requirement" section – and you have notified me in accordance with said policy – a missed test will be scored as a 0%.

## 5.3 Readings

In addition to the textbooks, I have listed a few papers and popular press articles – either suggested by the book or me – which are required reading. We will go over these in class. They are fair game for the tests; however, in respect to non-textbook readings *only*, tests will only cover what we discuss in class. Because of the pace of the course, I expect you to read the article before coming to class so that you understand the basics of it.

### 6 Students with Disabilities Statement

Italics quoted from http://equity.psu.edu/ods/faculty-handbook/syllabus-statement

I am happy to provide accommodation for students with disabilities. Unless reasonably impossible, please contact me and provide appropriate documentation within the first three weeks if accommodation is needed.

Penn State welcomes students with disabilities into the University's educational programs. Every Penn State campus has an office for students with disabilities. The Office for Disability Services (ODS) Web site provides contact information for every Penn State campus: http://equity.psu.edu/ods/disability-coordinator. For further information, please visit the Office for Disability Services Web site: http://equity.psu.edu/ods.

In order to receive consideration for reasonable accommodations, you must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: http://equity.psu.edu/ods/guidelines. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with an accommodation letter. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. You must follow this process for every semester that you request accommodations.

# 7 Academic Integrity Statement

Italics quoted from http://senate.psu.edu/policies-and-rules-for-undergraduate-students/47-00-48-00-and-49-00-grades/#49-20

Note: The Department of Economics has an extensive academic integrity policy at:

http://www.econ.psu.edu/undergraduate/academic-integrity

Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity at The Pennsylvania State University, and all members of the University community are expected to act in accordance with this principle. Consistent with this expectation, the University's Code of Conduct states that all students should act with personal integrity, respect other students' dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts.

Academic integrity includes a commitment by all members of the University community not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others.

### 8 Non-Discrimination Statement

Italics quoted from http://www.psu.edu/dept/aaoffice/statements.htm

The University is committed to equal access to programs, facilities, admission and employment for all persons. It is the policy of the University to maintain an environment free of harassment and free of discrimination against any person because of age, race, color, ancestry, national origin, religion, creed, service in the uniformed services (as defined in state and federal law), veteran status, sex, sexual orientation, marital or family status, pregnancy, pregnancy-related conditions, physical or mental disability, gender, perceived gender, gender identity, genetic information or political ideas. Discriminatory conduct and harassment, as well as sexual misconduct and relationship violence, violates the dignity of individuals, impedes the realization of the University's educational mission, and will not be tolerated. Direct all inquiries regarding the nondiscrimination policy to Dr. Kenneth Lehrman III, Vice Provost for Affirmative Action, Affirmative Action Office, The Pennsylvania State University, 328 Boucke Building, University Park, PA 16802-5901, Email: kfl2@psu.edu, Tel (814) 863-0471.

# 9 Extensive Attendance Requirement

## 9.1 Policy

During the course many possible situations may arise that would result in your inability to attend class, attend exams, or perform at a minimally acceptable level during an examination. Illness or injury, family emergencies, certain University-approved curricular and extra-curricular activities, and religious holidays can be legitimate reasons to miss class or to be excused from a scheduled examination.

In the case of your own illness or injury, confirmation from a physician, physician's assistant, a nurse-practitioner, or a nurse is required. Be advised that University Health Services cannot provide such verification unless they have provided treatment and the student authorizes release of information to the instructor. Further, barring extraordinary circumstances, the confirmation must be available to the instructor prior to the missed course event.

With regard to family emergencies, you must provide verifiable documentation of the emergency. Given the vast array of family emergencies the instructor will provide precise guidance as to what constitutes adequate documentation. Unless the emergency is critical you should notify the instructor in advance of your absence from the scheduled course event. In cases of critical emergencies, you must notify the instructor within one week of your absence.

For University-approved curricular and extra-curricular activities, verifiable documentation is also required. The student should obtain from the unit or department sponsoring the activity a letter (or class absence form) indicating the anticipated absence(s). The letter must be presented to the instructor at least one week prior to the first absence.

In the case of religious holidays, the student should notify the instructor by the third week of the course of any potential conflicts.

An important note for final exams: Early flights home, bus tickets to leave town, and family vacations are NOT valid excuses to miss or reschedule a final exam. Students should make plans to leave campus AFTER all their scheduled exams are completed. It is best not to book flights that leave during finals week. Instructors are required to give the final exams according to the University schedule, and cannot give makeups or reschedules for non-valid or non-approved excuses.

If a student misses a class during which an evaluative event (e.g., a quiz or an exam) takes place, and the student has a valid excuse, it is the policy of the Economics Department that the missed event may be made up in one of two ways that are to be decided by the instructor:

- 1. the student will take a make-up version for the missed evaluative event; or
- 2. the student will be excused from the missed event, and the weight of that event in the overall course grade will be reassigned to either the course final exam or to a subset of the subsequent evaluative events in the course.

Italics quoted from http://econ.la.psu.edu/undergraduate/valid-excuses

I will act as the instructor in the policy in italics. I will consider a reasonable amount of notification time the following:

Religious Observances	First Three Weeks of Class
	Unless Other Extenuating Circumstances Exist
University-Sponsored Extracurricular Activities	Before One Week Prior to Absence
Medical Emergencies	24 Hours Ahead of Missed Test
	Unless Impossible to Do So
	and Within One Week After Missed Test
Weddings	First three weeks of class
	or Within 48 Hours of Being Invited
	Whichever is <b>earlier</b>
	but no later than 72 hours before the test
Funerals	24 Hours Ahead of Missed Test
	Unless Impossible to Do So
	and Within One Week After Missed Test

# 9.2 Note from University Health Services

Italics quoted from http://studentaffairs.psu.edu/health/welcome/illnessVerification/.

### Policy for Verification of Illness

University Health Services (UHS) does not provide verification of illness forms for minor or routine illnesses or injuries.

UHS may provide verification of illness forms for significant prolonged illnesses or injuries resulting in absence from classes.

#### Routine Illness

A routine illness would be a minor illness or injury, such as colds, and flu-like or self-limitedgastrointestinal illnesses.

For routine illness-related absences, students should correspond directly with the faculty as soon as possible regarding their situation, ideally before they miss a class, exam, or other evaluative activity.

#### Significant, Prolonged Illness

A significant, prolonged illness is a serious illness or injury lasting at least a week. Medical documentation is required, either from UHS clinicians or outside clinicians.

When appropriate, students may request the verification during their UHS clinician visit or send a secure message to their clinician or the Advice Nurse through myUHS. If a student wants a verification of illness from UHS and has received care from an outside provider for a significant, prolonged illness, they must provide appropriate documentation to the UHS Director, 502A Student Health Center, 814.865.6555.

# 10 Department of Economics – Concerns

(Standard statement provided by department.) Please see me if you have concerns or comments about the course. If you would like to provide feedback about this course you may also contact the Director of Undergraduate Studies in Economics or leave a comment in the box that the Department maintains in 303 Kern.

## 11 Class Schedule

## 11.1 Coverage for Test I

M, Aug 24: Go Over Syllabus, Introduce Course

Readings for Ch. 1: Update on the Sirius XM Merger:

http://investor.sirius.com/releasedetail.cfm?sh print=yes&ReleaseID=324858

Note from Charles River Associates:

http://ir.crai.com/phoenix.zhtml?c=97435&p=irol-newsArticle\_print&ID=1182530

For First Week, Listen To:

NPR, All Things Considered Report on Methane Regulations:

http://www.npr.org/player/embed/432762331/432762332

BBC Report on Solar Panels:

http://www.bbc.co.uk/programmes/p023f4sq

W, Aug 26: Market Regulation, Ch. 1 F, Aug 28: Market Regulation, Ch. 1

Reading for M&E, Ch. 2-3: "The Market Based Lead Phasedown":

http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-03-37.pdf

M, Aug 31: Markets and the Environment, Ch. 4

W, Sept 2: Markets and the Environment, Ch. 2

F, Sept 4: Markets and the Environment, Ch. 3

M, Sept 7: LABOR DAY!

W, Sept 9: GROUP WORK DAY!

**F, Sept 11:** Math day: Explanation of what "marginal" and dy/dx mean. Expected value.

M, Sept 14: Market Regulation, Ch. 2

W, Sept 16: Market Regulation, Ch. 2

F, Sept 18: Market Regulation, Ch. 2

M, Sept 21: GROUP WORK!

W, Sept 23: Not covered on Test I. Covered on Test II: Market Regulation, Ch. 3

F, Sept 25: REVIEW SESSION for Test I. Homework due.

M, Sept 28: Test I

## 11.2 Coverage for Test II

Note that material from Wednesday, September 23 will be covered on Test II.

W, Sept 30: Market Regulation, Ch. 3 F, Oct 2: Market Regulation, Ch. 3

**Reading for** *Market Regulation*, **Ch. 4:** (idea from book) *Skip the appendix.* Joskow, P. (1987). "Contract Duration and Relation-Specific Investments: Empirical Evidence from Coal Markets." *American Economic Review* 77, pp. 168-85.

M, Oct 5: Market Regulation, Ch. 4 W, Oct 7: Market Regulation, Ch. 4 F, Oct 9: Market Regulation, Ch. 4

M, Oct 12: GROUP WORK!

W, Oct 14: Market Regulation, Ch. 5 F, Oct 16: Market Regulation, Ch. 5

M, Oct 19: Market Regulation, Ch. 5 W, Oct 21: Market Regulation, Ch. 6 F, Oct 23: Market Regulation, Ch. 6

**Reading for Market Regulation Ch. 7:** (idea from book) Hausman, J. and Leonard, G. (2002). "The Competitive Effects of a New Product Introduction: A Case Study." *The Journal of Industrial Economics* L(3), pp. 237-63

M, Oct 26: Market Regulation, Ch. 6

W, Oct 28: GROUP WORK!

**F, Oct 30:** *Market Regulation*, Ch. 7 **M, Nov 2:** *Market Regulation*, Ch. 7

W, Nov 4: REVIEW SESSION for Test II. Homework due.

F, Nov 6: Test II

## 11.3 Coverage for Test III

M, Nov 9: Market Regulation, Ch. 8W, Nov 11: Market Regulation, Ch. 8/9F, Nov 13: Market Regulation, Ch. 9

**M, Nov 16:** *Market Regulation*, Ch. 10 **W, Nov 18:** *Market Regulation*, Ch. 10

F, Nov 20: Markets and the Environment, Ch. 5

Thanksgiving break: I am thankful for all of you!

#### Readings for final portion of the course:

- 1. Auffhammer, M. and R. Kellogg. (2011). "Clearing the Air? The Effects of Gasoline Regulation on Air Quality." *American Economic Review* 101, pp. 2687-722.
- 2. Blog post about this issue from Econbrowser: http://econbrowser.com/archives/2005/06/the\_case\_for\_mo
- 3. Blog post about CAFE standards: http://econbrowser.com/archives/2007/03/cafe standards

M, Nov 30: Markets and the Environment, Ch. 8 W, Dec 2: Markets and the Environment, Ch. 9 F, Dec 4: Markets and the Environment, Ch. 10

**M, Dec 7:** *Market Regulation*, Ch. 17 **W, Dec 9:** *Market Regulation*, Ch. 17

F, Dec 11: REVIEW SESSION for Test III. Homework due.

Test III will be during the TBD final exam period. It is still non-cumulative in spirit – and 45 minutes – beginning at the beginning of the exam period. Late arrivals must still finish at the time the rest of the class finishes.