Managerial Economics

ECON 590

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COURSE DESCRIPTION

This course, a synthesis of micro and macro economics, develops a high level of knowledge regarding the use of economic models to understanding individual, firm, and government behavior. An understanding of the economic fundamentals that drive efficiency, effectiveness and competitive advantage is essential for managers, particularly in turbulent times.

During the launch week at Purdue, we have two sessions together where we cover the core principles of economic decision making with a focus on firms behavior. In the weeks leading up to the residency at Purdue, there are a number of assigned textbook chapters, video lectures, and three homework assignments. By completing this work you will learn the basics of constrained utility maximization, market equilibrium, social welfare, and empirical methods in economics. The focus will then shift from the efficiency of markets to instances where government action (public policy) affects economic decisions: inflation, government debt, externalities, and public goods.

Our time on campus will be spent covering advanced policy topics. Each policy topic introduces a particular economic model. The focus is on how current (but not new) economic conditions influence the business, consumer, and personal decisions you make. My view is that the specific economic policy topics that we cover are less important than learning to think like an economist when approaching a problem.

COURSE OBJECTIVES

- 1. This course will help you better understand the U.S. economy
- 2. This course will make you a more astute participant in the economy
- 3. This course will give you a better understanding of the limits of economic policy

COURSE TEXTBOOK

Public Finance and Public Policy by Jonathan Gruber, Worth Publishers

I decided to avoid a typical Intermediate Economics textbook because they emphasize the mathematical derivations at the expense of application. While mathematical economic models are an important part of the course, I present the models in final form and directly apply them to the policy question at hand.

STUDENT EVALUATION

Your grade in this course will be determined by your performance on three homework assignments, course participation, and a final exam. The letter grade will be based upon a grading curve that will be applied to the total score at the completion of the course. Grade modifiers of + and - will be used. The total score for the course will be calculated using the following weights:

- Homework 1 15 %
- Homework 2 15 %
- Homework 3 15 %
- Participation 15 %
- Final Exam 40 %

Homework

You are welcome to work with others in completing your homework, but you must write the answers yourself (don't copy/paste from someone else). Late assignments are accepted, but points are deducted at a rate of 10% percent of the total per day late. Submit through the course website.

Participation

Participation means asking and answering questions in class sessions, participating in the class activities, and completing the in-class worksheets (learning exercises). I'll do my best to be fair, but I understand that awarding points for classroom participation is inherently subjective. So, why does your grade depend (in a small way) on course participation? Everyone will learn more and have a better experience if we have active discussions both online and in class. Economists believe that incentives matter, so I'm providing an incentive to participate.

Final Exam

The final exam is open book, open notes, and will cover all of the material from the course. You will have three hours from the time you download the exam to upload your completed answers. You are not allowed to discuss the final exam with anyone other than the instructor until after the exam period. You may not provide or receive help from any other person in completing the exam. Your exam submission is to be exclusively your own work.

EMBA LAUNCH WEEK

Class Session 1 (9/12) – Principles of Economics

<u>Description:</u> Welcome to Economics. The first session is a review of the basic principles of economics: trade-offs, opportunity cost, marginal thinking, free trade, the free market, GDP, inflation, and unemployment.

Class Session 2 (9/12) – Firm Behavior

<u>Description:</u> We will examine an economic model of the cost of production and the behavior of firms in a competitive market with a focus on the decision for an entrepreneur to enter the market. We will also review firm behavior in non-competitive markets.

PRE-SESSION ASSIGNMENTS

Week	Topic	Textbook	Videos	Homework
1	Constrained Optimization	2.1-2.2	1.1-1.4	
2	Equilibrium	2.3-2.5	2.1-2.6	1
3	Empirical Tools	3.1-3.4	3.1-3.4	
4	Government Budget	4.1-4.5	4.1-4.4	2
5	Externalities	5.1-5.5	5.1-5.4	
6	Public Goods	7.1-7.4	6.1-6.4	3
7	Read ahead to be ready for the residency. Focus on chapters 12, 13, and 20.			

HOMEWORK ASSIGNMENTS

Homework 1 - Constrained Optimization and Equilibrium Covers material from Chapter 2

Homework 2 - Empirical Tools and Government Budget Covers material from Chapters 3 & 4

Homework 3 - Externalities and Public Goods Covers material from Chapters 5 & 7

SCHEDULE FOR IN-RESIDENCE CLASSES

Class Session 3 (11/18) – Market Equilibrium Experiment

Reading: Chapters 2 and 5, also 19.1

Economic Model: Supply and Demand Model with Taxes

<u>Description:</u> Half the students will be buyers (with assigned marginal valuations) and half will be sellers (with assigned marginal costs of production). We hold a live double auction and then discuss the results and what they imply about markets.

Class Session 4 (11/18) – Social Insurance

Reading: Chapter 12 including the appendix

Economic Model: Expected Utility Model

<u>Description:</u> One of the most important changes in U.S. public policy over the past 60 years is the increase in government spending on social insurance programs including Medicare, Social Security, unemployment insurance (UI), disability insurance (DI), and worker's compensation (WC). We will examine why insurance has value in an economic model and the major sources of failure in insurance markets.

Class Session 5 (11/19) – Social Security

Reading: Chapter 13 intro, 13.1, 13.2, 13.4

Economic Model: Overlapping Generations Model

<u>Description</u>: Using an overlapping-generations model, we will study how Social Security works, the projected program shortfall, proposed reforms, and the impact on retirement.

Class Session 6 (11/19) – Health Care

Reading: 15.1, 15.2, 15.4, 16.1, 16.2, 16.3, 16.6

Economic Model: Health Care Effectiveness Curve

<u>Description:</u> Americans spend (public + private) about twice as much on health care as citizens of other OECD countries. We will examine the US health care system, how health insurance works, and the government's role in the health care market including Medicare, Medicaid, and provider regulation.

Class Session 7 (11/21) – Optimal Taxation

Reading: Chapter 19 appendix and Chapter 20 (including the appendix)

Economic Model: Deadweight Loss and Elasticities

<u>Description:</u> We will examine the US tax system and compare it to the tax systems common in other countries. We will then examine empirical evidence on the market reaction to taxes and discuss what this implies about the optimal design of a tax system.

Class Session 8 (11/21) – Taxes on Labor and Savings

Reading: Chapters 21 & 22

Economic Model: Labor Supply Utility Model

<u>Description:</u> This is the tax day. In the first session, we will examine the consequences of taxes on labor (i.e. income taxation, payroll taxation) and savings taxes (inflation, subsidies for retirement).

Class Session 9 (11/22) – Wealth and Corporate Taxes

Reading: Chapters 23 & 24

Economic Model: Return on Investment

<u>Description:</u> In the second tax-day session, we will examine the consequences of taxes on wealth (capital gains taxation, estate taxation, property taxation) and corporate taxes (dividends taxation, corporate income taxation).

Class Session 10 (11/23) –Growth and Inequality

Reading: handout

Economic Model: Solow Growth Model

<u>Description:</u> The large increase in income inequality in the U.S. is primarily the result of an increase in labor income inequality, not an increase in wealth inequality. We will examine the cause of the increased labor income inequality in the context of the Solow growth model.

Class Session 11 (11/23) – Political Economy

Readings: Chapter 9

Economic Model: Median Voter Model

<u>Description:</u> Correcting externalities and providing public goods are two important roles of government. However, citizens have heterogeneous preferences that must be translated into government policy. We will study the U.S. voting system, Arrow's Impossibility Theorem, the Median Voter Theorem, and several sources of government failure.

Class Session 12 (11/23) – Education and International Trade

Reading: Chapter 11

Economic Model: Education Spending

<u>Description</u>: Trade and education are the driving forces of long-run economic growth, but have important implications for income inequality. We will review the evidence in order to discuss the role of government in education and trade.

PURDUE UNIVERSITY POLICIES

Academic Integrity

Academic integrity is one of the highest values that Purdue University holds. Cheating, plagiarism, or knowingly furnishing false information to the University are examples of academic dishonesty. If I find that a student is cheating on an assignment, that student will receive no credit for the assignment. If I find that a student is cheating on an exam (either receiving or giving help), the students involved will receive no credit for exam and the student will be reported to the Dean of Students. Individuals are encouraged to alert university officials to potential academic dishonesty by either emailing integrity@purdue.edu or by calling 765-494-8778. While information may be submitted anonymously, the more information that is submitted provides the greatest opportunity for the university to investigate the concern.

Student Code of Honor

The purpose of the Purdue University academic community is to discover and disseminate truth. In order to achieve these goals, the university commits itself towards maintaining a culture of academic integrity and honesty. For this to be possible, self-discipline and a strong desire to benefit others must be present within each individual. Therefore, we students must follow the Regulations Governing Student Conduct of Purdue University out of a sense of mutual respect, rather than out of fear of the consequences of their violation.

Accessibility and Accommodations

Purdue University strives to make learning experiences as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, you are welcome to let me know so that we can discuss options. You are also encouraged to contact the Disability Resource Center at: drc@purdue.edu or by phone: 765-494-1247.

Online Behavior

Disruptive behavior on the discussion boards or towards others in the class is not tolerated and is grounds for being removed from the online class. Disruptive students will be referred to the Dean of Students Office for further action. Purdue University is committed to maintaining a community which recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members; and encourages each individual to strive to reach his or her own potential. In pursuit of its goal of academic excellence, the University seeks to develop and nurture diversity. The University believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life. Purdue University prohibits discrimination against any member of the University community on the basis of race, religion, color, sex, age, national origin or ancestry,

genetic information, marital status, parental status, sexual orientation, gender identity and expression, disability, or status as a veteran. Any student who believes they have been discriminated against may visit www.purdue.edu/report-hate to submit a complaint to the Office of Institutional Equity. Information may be reported anonymously.

Use of Copyrighted Materials

The video lectures, problem sets, and quizzes that are presented as part of this course are protected by copyright law. Always assume the materials presented by an instructor are protected by copyright unless the instructor has stated otherwise. Students enrolled in this course are permitted to take notes, which they may use for individual/group study or for other non-commercial purposes reasonably arising from enrollment in the course. No individual is permitted to sell or otherwise barter course videos, notes, or course materials, either to other students or to any commercial concern, without the express written permission of the course instructor.

In Case of Emergency

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control. Relevant changes to this course will be posted onto the course website or can be obtained by contacting the instructors or teaching assistants via email. You are expected to read your @purdue.edu email on a frequent basis.