

Economics 511: Market Failures and Public Economics (Public Goods Theory)

University of Illinois, Urbana-Champaign

Spring 2023

Professor David Albouy

Office: 225A David Kinley Hall (DKH)

Office Hours: Wednesdays 11:00 to 11:50am; or by appointment

Email: albouy@illinois.edu

Lecture: Monday and Wednesday: 3:30 to 4:50p.m. 223 David Kinley Hall

Description: This course examines the role of government in the economy, and how the market may fail to produce efficient or equitable outcomes. We consider policies that may correct for market failures, and challenges posed by politics and incomplete information. The course will have a strong theoretical angle. It also includes an overview of the federal, state, and local budgets, and takes both a contemporary and historical look at the role of government in providing defense, infrastructure, education, pensions, health care, unemployment insurance, and other services.

Prerequisites: Intermediate microeconomics (ECON 302) or the equivalent.

Grading

30% Six assignments, each worth 5%: (Feb 15, Mar 1, Mar 22, Apr 5, Apr 19, and May 3)

5% A good effort with mostly correct answers

4 A fairly good effort with many correct answers

3 A poor effort with many mistakes

2 A very incomplete assignment

1 A sheet with your name on it and the assignment number

0% Missing or late - *please hand in whatever you have!*

30% Midterm exams (in class Mar 6 & Apr 12)

40% Final exam (8-11 p.m., May 8)

Exam will be based primarily on material taught in lecture. However, some questions may refer to material only explained fully in the required reading.

****Up to 5% extra credit for attendance, class participation, and pronouncing my name correctly.**

Assignments, deadlines, and grades posted online (compass2g.illinois.edu)

Please contact me during the **first two weeks of class** by email to work out arrangements if you have special needs or your midterm conflicts with a midterm for another course. Except for documented illnesses and emergencies, **no special arrangements for examinations will be made after the second week of class.** You must bring a picture ID to all examinations.

Required Reading (a complement with, not a substitute for, lecture!)

Jonathan Gruber, *Public Finance and Public Policy* (Institutions, empirics, and basic theory)

John Leach, *A Course in Public Economics*. (More advanced theory)

Jean Hindriks and Gareth D. Myles, *Intermediate Public Economics*

Additional readings – typically notes and journal articles – will be posted online

Additional References

Edward M. Gramlich, *A Guide to Benefit-Cost Analysis*, Second Edition.

Walter Nicholson, *Microeconomic Theory: Basic Principles and Extensions*

COURSE OUTLINE (26 lectures + 1 review session + 2 midterms + final)

Attend all classes! All lecture times are approximate. Some topics may be dropped if time is short.

1) Introduction to Public Economics and Its Past, Present, and Future (6 Lectures)

- 1/18 Introduction: Definition and scope of public economics; positive & normative analysis.
- 1/23 A brief history of the public sector
- 1/25 The growth of the public sector
- 1/30 Theories of the public sector: size
- 2/6 Theories of the public sector: excess
- 2/6 Overview of federal, state, and local budgets; international comparisons.
Deficit and debt dynamics, generational accounts, and long run prospects.

Reading: Gruber Ch 1, 3 and 4; Leach Ch 1; H&M Ch 1, 4, 5.

2) Market Success and Failure: Competitive Equilibrium and Welfare (4 Lectures)

- 2/8 Cardinal, ordinal, and intercomparable utility; utility possibility sets, social welfare.
Pure exchange economy and planner's problem. Pareto efficiency; the equity-efficiency tradeoff. Social welfare functions
- 2/13 Market equilibrium; First and Second Fundamental Theorems of Welfare Economics
- 2/15 Simple production economy. Production possibility frontiers. Firm profit maximization and supply functions. 2z2 production economy. Community indifference curves.
Consumption, production, and match efficiency.
- 2/20 Consumer and producer surplus, deadweight loss. The use of knowledge in society
Socialist-calculation debate.

Reading: Gruber, Ch 2 (including Appendix); Leach Ch 2, 3, 4, 5; H&M Ch 2, 13.1-3,7, 9-11;

3) Increasing Returns to Scale & Imperfect Competition; Subsidies & Taxation (3 Lecture)

- 2/22 Marginal versus average cost; minimum efficient scale, monopoly pricing, natural monopoly; problems with pricing intellectual property
- 2/27 Subsidies versus lump-sum transfers. Partial equilibrium model of tax and subsidy incidence.
- 3/1 Deadweight-loss of taxation and monopoly. Public-sector pricing.

Reading: Leach Ch 14, 15.1-2, 16.1.,17, H&M Ch 8, 15.1-2

*****1st Midterm Exam on above material, scheduled in class on Mon, Mar 6 *****

4) Externalities and Public Goods (4 Lectures)

- 3/8 Positive and negative externalities; free-riding, common resource, and coordination problems. Pigouvian taxation.
- 3/20 Quantity and price regulation; pollution tax vs. tradable permits
- 3/22 The Coase Theorem, hold-up and assignment problems. Pure and impure public goods
Nash equilibrium and strategic inefficiencies, Strategic complements and substitutes.
- 3/27 Samuelson's Rule.

Reading: Gruber, Ch 5, 6, 7; Leach Ch 6, 7, H&M Ch 6,7,8

Spring Break

5) Asymmetric Information (2 lectures)

- 3/29 Hidden actions, adverse selection and the market for lemons; Insurance markets with imperfect competition
- 4/3 Hidden types and moral hazard

Reading: Gruber, H&M 10

6) Cost-Benefit Analysis and Valuation Techniques (2 Lectures)

- 4/5 Hicks-Kaldor compensation principle; stated preference and contingent valuation;
- 4/10 Revealed preference; hedonic methods, and compensating differentials; Shadow prices the value of time, safety, human life, and cleaner air. Quality of life measurement.

Reading: Gruber, Ch 8; Gramlich

*****2nd Midterm Exam on above material, scheduled in class on Wed, Apr 12 ******

7) Social Choice, Political Economy, and Rent Seeking (3 Lectures)

- 4/17 Lindahl Pricing, Majority voting, Condorcet's Paradox; Arrow's Impossibility Theorem
- 4/19 Median voter theorem, Electoral competition, polarization, Citizen-candidate model.
- 4/24 Rent-seeking, lobbying and special interests; Complete and Partial Dissipation Theorem

Reading: Gruber Ch 9, H&M Ch. 11.12

8) Local Public Economics and Education (2 Lectures)

- 4/26 Advantages and disadvantages of federal systems; intergovernmental grants. (e.g. matching, block), flypaper effect. The Tiebout model of local public goods, sorting, and benefit taxation; fiscal zoning
- 5/1 School finance, school choice and vouchers, private and social return to education;

Reading: Gruber Ch 10, 11; Leach Ch 12. H&M Ch 19, 20

5/3 Final Exam Review

******CUMULATIVE Final Exam on ALL of the above, 8-11 a.m., Mon, May 8******