

Economics 411: Public (Sector) Economics
University of Illinois, Urbana-Champaign
Fall 2024

Professor David Albouy

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Office: 225A David Kinley Hall (DKH)

Lecture: Monday and Wednesday, 3:30 – 4:50 pm, 123 DKH

Office Hours: Wednesday, 11:00 to 11:50 and Thursday, 2:00 to 2:50pm, 225A DKH

Pedagogical Goals:

- Learn to apply scientific principles and economic logic to complex issues relevant to the public sector, including taxation, regulation, and social insurance.
- Improve familiarity with public programs in the U.S. and the role of government in society.
- Better understand how to interpret statistical and econometric analyses, and how to find reliable information.
- Deepen understanding of how decentralized individual behavior in markets affects economic outcomes, through the lenses of optimization and equilibrium.
- See how information problems challenge the ability of government to make effective policy and see when markets can help.
- Consider the welfare effects of different policies and the influence of political forces.

Prerequisites: Intermediate Micro-economic Theory (e.g., ECON 302), Economic Statistics II (e.g., ECON 203).

Evaluation:

70% Weekly EITHER homework OR quiz: 5 points/week x 14 weeks

- a. Homework assignments assigned at end of the week (Thursday) due one week later.
 - Short questions related to lecture, reading, or viewing.
- b. In class quiz, usually Thursday, on material from the week before
 - Cover previous lecture, reading or assigned viewing.
 - May use ONE PAGE of notes (front and back) in OWN HANDWRITING

*Absences for quizzes count as zeroes

**Your two lowest weekly grades can be converted from as low as 0 to 5 by attending office hours to discuss material, readings, or *previous* homework (don't wait too long).

30% Final exam (Dec 16, 7-10p): roughly equal parts multiple choice, short answer & long answer questions

+5% Attendance and Participation

- Attendance will be taken *randomly* (not every day)
- Participation for asking questions/stimulating discussion in class or office hours.
- Pronouncing my last name correctly (in English, rhymes with “Illinois”)

Reading is a *complement, not a substitute* for lecture. This course is not “taught out of a book.”

Class attendance and taking detailed notetaking is essential. Material not on the slides, either from the book or presented verbally, may be on quizzes, homework, and exams. In fact, these will stress subjects most discussed in class (not necessarily what is in the slides or book).

*Master's Students: 1) find an economic article related to public economics and receive my approval; 2) come to my office for an oral exam for 15 minutes on Reading Day (Dec 12)

Assignments, deadlines, and grades posted on the course website (Canvas). Greater information will also be provided in class, so be sure to attend.

Laptop computers are **not** to be used in class. Please take notes on paper/notebook or a tablet.

Please contact me during the **first three weeks of class** by email to work out arrangements if you have any special needs. Except for documented illnesses and emergencies, **no special arrangements for examinations will be made after the third week of class.** Bring a picture ID to all examinations.

This class sometimes covers sensitive topics on inequality, race, gender, and other issues. Please let me know if you have needs or requests regarding family or health needs, pronouns, or anything else important to you. You are respected and valued in this class and will not be graded for political, religious, or moral beliefs – viewpoint diversity is welcome and encouraged. Personal attacks, harassment, and bullying are not. You are welcome to come to office hours to chat not only about class, but your aspirations in academia, career, life, and intellectual journey.

Unlike many of the instructors you have had thus far, I am a tenured research-oriented professor. Much of my time is spent engaging in research activities including publishing, peer-review, academic conferences, advising doctoral students, and mentoring junior faculty. This means that I may share with you some of my own published findings, as well as what is currently being discussed. Also, I can provide you with more of an insiders' view of the research in public economics. If you are interested in pursuing economics to a higher level, I can advise you on graduate programs or research assistantship when you graduate – do not delay.

Required Reading – notes, book chapters, journal articles – **posted online.**

Jonathan Gruber, *Public Finance and Public Policy* (7th edition) – **you should buy (sorry)**

I reserve the right to stop posting slides if attendance falls – not attending class exerts a negative externality on other students so show up.

Additional References (Some book chapters will be taken from these.)

Joseph E. Stiglitz and Jay K. Rosengard, *Economics of the Public Sector*, 4th Edition

Harvey S. Rosen and Ted Gayer, *Public Finance*

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

John Leach, *A Course in Public Economics*.

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

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

**Scott Cunningham *Causal Inference*

COURSE OUTLINE (29 lectures + final exam)

Attend all classes! All lecture times are approximate. Topics by week are more precise than topics by day. Some topics may be dropped if time is short.

Week 1: Introduction

8/26: Introductions. Syllabus review. Defining “public economics”. Economic philosophy & explanation. Positive vs. normative analysis. Market failures: imperfect competition, externalities, asymmetric information. Efficiency vs. distributive equity.

Reading: Gruber Ch 1; *Rosen & Gayer Ch 1; *Stiglitz & Rosengard Ch 1

Week 2: Evolution of the Public Sector and Budget Analysis

8/28: The origins of the public sector in world history: military, public goods, redistribution, and social insurance. Why does government grow? Demand (Wagner) cost (Baumol)

9/4: Federal, state, and local budgets; Deficits and debts; challenges in public accounting with local examples

Reading: Myles & Hindriks Ch 5; Gruber Ch 4

Videos: Marginal Revolution University: “The Hockey Stick of Human Prosperity.”

Week 3: Utility Theory and Social Welfare; Distributive Justice and Liberal Governance

9/9: Old vs. New Welfare Economics: Utilitarianism and preferences; Pareto efficiency; Rawlsian vs. egalitarian distributive justice.

9/11: Rules: the “Harm Principle” and categorical imperative; Nozick’s contractualism and the minimal state. Paternalism vs consumer sovereignty. First and Second Welfare Theorems. Utopianism and Communism.

Reading: Stiglitz and Rosengard Ch 3; Hindriks and Myles Ch 13; *Gruber Ch 2

Videos: Philosophy & Politics: “Ronald Dworkin & Bryan Magee.”

Week 4: Market Basics and Welfare Economics: Planners vs. Markets

9/16: Planner’s problem. Simple exchange economy/Edgeworth Box; utility possibility set; allocative efficiency. Aggregation. Market equilibrium; Envy-free allocations. In-kind vs cash transfers.

9/18: Simple production economy. Profit maximization and supply. Match efficiency. Production possibility set and production efficiency. Consumer and producer surplus. Price Controls.

Reading: Stiglitz and Rosengard Ch 4; Rosen & Gayer Ch 3

Videos: Marginal Revolution University: “Information and Incentives,” “A Price is a Signal Wrapped in an Incentive,” “Price Ceilings: Shortages and Quality Reduction & Lines and Search Costs.”

Week 5: Basic Welfare Economics, Equity, and Broader Topics Economics as Social Science; Behavioral Response to Taxation

- 9/23: Comparative statics with taxes. Supply and demand curves, graphically and with the implicit function theorem. Price elasticities. Incidence and deadweight loss of taxation.
- 9/25: Medicaid in-kind vs. cash benefits; behavioral response to mandated benefits. Scientific ethics; Observability and falsification. Casual inference. Experimental and quasi-experimental methods.

Reading: Gruber, Ch 3, 21 & 22; *Rosen & Gayer, Ch 3

Videos: Marginal Revolution University: “Tax Revenue and Deadweight Loss,” “How to Read Economics Research Papers,” “Introduction to Differences and Differences.”

Week 6: Externalities and Corrective Policies

- 9/30: Externalities definition; free-rider problem; common-resource problem; coordination problem. Decentralized solutions: the Coase theorem, property rights, and bargaining; assignment and measurement problem; hold-up problem. Examples drawn from driving and dirty energy.
- 10/2: Pigouvian taxes; vs. quotas and cap and trade. Optimal policies under uncertainty. Climate change.

Reading: Gruber Ch 5 & 8

Videos: Marginal Revolution University: “Externalities and Incentives: The Economics of COVID,” “How Pollution Permits Paradoxically Reduce Emissions.”

Week 7: Cost-Benefit Analysis; Non-Market Valuation; Public Goods

- 10/7: Cost-benefit analysis vs. cash-flow accounting. Stated vs. revealed preference. Valuing benefits over time and generations with risk. Opportunity cost and time savings. The value of a statistical life. The “best” places to live.
- 10/9: Public goods with private under-provision. Samuelson rule. Best responses and equilibrium. Excludability and congestion. Other causes of private charity: (effective?) altruism and warm glow.

Reading: Gruber Ch 6 & 7; Stiglitz and Rosengard Ch 5, 10 & 11

Videos: Marginal Revolution University: “Public Goods and Asteroid Defense.”

Week 8: Imperfect Competition, Price Controls, and Increasing Returns

- 10/14: Reimagining market efficiency. Iso-consumer & producer surplus curves in price-quantity space. Market power and equilibria off the curves. Monopoly and monopsony; inverse elasticity rule; bilateral bargaining and unions.
- 10/16: Minimum efficient scale. Increasing returns and problems with average and marginal-cost pricing; excess entry; regulation of profits.

Reading: Stiglitz and Rosengard Ch 7; Nicholson and Snyder Ch 14 & 16

Videos: Marginal Revolution University: “Patents, Prizes, and Subsidies.”

Week 9: Asymmetric Information and Insurance Markets

- 10/21: Asymmetric information; risk segmentation; “market for lemons,” moral hazard,
- 10/23: Old-age insurance: fully funded vs. pay-as-you-go systems; social security.

Videos: Marginal Revolution: “Asymmetric Information and Used Cars” “Moral Hazard”

Reading: Gruber Ch 12, 15 & 16

Week 10: Insurance Markets for Employment and Old Age

10/28: Health insurance in private markets. Medicare and Medicaid and health care reform

10/30: Unemployment & disability insurance, workers’ compensation.

Reading: Gruber Ch 13 & 14

Week 11: Inequality Measurement, Taxation in Practice

11/4: Income, wealth, and consumption: measurement and inequality. Income taxation.

11/6: Means-tested programs and effective tax rates. Optimal taxation: efficiency and equity.

Reading: Gruber Ch 17, 18, 19, 20, 21

Week 12: Taxes on Savings, Capital, and Consumption

11/11: Taxes on savings & incentives for retirement savings; Taxation and risk taking, capital gains taxes; property taxes and tax expenditures for housing.

11/13: Taxes on businesses and corporations; Tax avoidance and evasion; Consumption taxes and tax reform

Reading: Gruber Ch 22, 23, 24, 25

Week 13: Fiscal Federalism and Local Government. Property and Federal Taxes over Space.

11/18: Centralization vs. decentralization. How local governments can resemble markets: the Tiebout model.

11/20: Property and land taxes: efficiency and equity. The unequal geographic burden of federal taxation.

Reading: Gruber Ch 9

THANKSGIVING BREAK

Week 14: Political Economy, Voting, and Rent seeking.

12/2: Lindahl pricing and preference revelation. Majority voting and surplus maximization. Condorcet’s paradox. Strategic voting. Arrow’s impossibility theorem. alternate voting systems

12/4: Why do people vote? Median voter theorem. Electoral competition and representative democracy. Legislative bargaining. Rent seeking and dissipation theorems.

Reading: Gruber Ch 10

Videos: Veritasium: “Why Democracy is Mathematically Impossible”

Week 15: Education, Bureaucracy and Conclusion

- 12/9: Higher education and student loans. Social returns to education and reasons for subsidizing public education.
- 12/11: Theories of excessive government. Soft budget constraints. Corrupt use of power. Conclusions and Final Remarks.

Reading: Gruber Ch 11

Videos: “Selection Bias: Will You Make More Going to a Private University?”

FINAL EXAM on Monday, December 16, 7:00-11:00pm