

**University of Colorado -- Boulder**  
**Department of Economics**

**Prof. Jeffrey S. Zax**  
**zax@colorado.edu**  
**303-492-8268**

**Economics 8231**  
**Syllabus and Schedule**  
**14 January 2008**

Welcome. I am Prof. Jeffrey S. Zax. This is Economics 8231, Local Public Economics. This course will explore theoretical and empirical models of public goods, congestible public goods, intrajurisdictional externalities, inter-governmental competition, federal government structures and governmental institutions. Prerequisites are a previous graduate course in microeconomic theory, some previous exposure to econometric analysis and a modicum of enthusiasm.

The material to be mastered in this course is contained in the lectures and assigned readings. The syllabus, any assignments and readings that are difficult to access elsewhere will be available, typically in .pdf format, at the course website, [www.colorado.edu/Economics/Zax/Econ8231](http://www.colorado.edu/Economics/Zax/Econ8231).

This class will meet on Tuesdays and Thursdays from 12:30 p.m. to 1:45 p.m. in Economics 5. I will hold regular office hours between 2:00 p.m. and 3:30 p.m. on Tuesdays and Thursdays in my office, Economics 111. Appointments can be made for meetings at other times, if these are inconvenient.

Performance in this class will be judged on the basis of four instruments. The final examination will take place on Monday, May 5<sup>th</sup>, from 7:30 a.m. – 10:00 a.m. It will require the full 2.5 hours and be worth 150 points. Any student who has three final examinations scheduled on 5 May, is eligible to reschedule the final examination in this course and wishes to do so must meet with me immediately.<sup>1</sup> A midterm examination will take place on 6 March, approximately at the end of section III. It will be worth 75 points.

In addition, all students will write two short term papers, each outlining possible research projects. The first, due on Tuesday, 19 February, must be no longer than three pages, and is worth 25 points. The second, due on Tuesday, 8 April, must be no longer than five pages, and is worth 50 points.

The course as a whole, then, will be valued at approximately 300 points. The score attained by each student, evaluated relative to the score that would be attained by an intelligent student of this subject, will determine final letter grades.

---

<sup>1</sup> University policies regarding multiple final examinations on the same day are available at [www.colorado.edu/policies/final\\_exam.html](http://www.colorado.edu/policies/final_exam.html).

## Tentative course schedule

- |  |   |
|--|---|
| 15, 17, 22, 24<br>January                | I. Congestible public goods. <ul style="list-style-type: none"><li>A. Introduction to club goods</li><li>B. Club good extensions with homogeneous populations</li><li>C. Pricing congestible facilities</li><li>D. Mixed clubs and institutional forms</li><li>E. Empirical treatments</li></ul>  |
| 28, 31 January,<br>5, 7, 12, 14 February | II. Intra-jurisdictional externalities <ul style="list-style-type: none"><li>A. Local spatial spillovers and externalities</li><li>B. Agglomeration economies</li><li>C. Urban growth</li><li>D. Sprawl</li><li>E. Investments in infrastructure</li></ul>  |
| 19, 21, 26, 28 February,<br>4 March      | III. Demand and supply of local public services <ul style="list-style-type: none"><li>A. The Tiebout mechanism<ul style="list-style-type: none"><li>1. Tiebout incentives and equilibria</li><li>2. Private governments</li><li>3. Empirical Tiebout models</li></ul></li><li>B. Capitalization</li><li>C. Expenditures and services with citizen mobility</li><li>D. Taxation<ul style="list-style-type: none"><li>1. Financing urban public services</li><li>2. Property taxation</li><li>3. Business incentives and enterprise zones</li></ul></li></ul> |
| 6 March                                  | Midterm examination   |
| 11, 13, 18, 20 March,<br>1, 3 April      | IV. Intergovernmental competition <ul style="list-style-type: none"><li>A. Fiscal competition and tax exporting</li><li>B. Spillovers: Peer effects and externalities</li><li>C. Systems of local government, inequality and growth</li></ul>   |
| 8, 10, 15, 17 April                      | V. Federal structures <ul style="list-style-type: none"><li>A. Local government hierarchies</li><li>B. Fiscal federalism</li><li>C. Revenue sharing</li></ul>   |
| 22, 24, 29 April,<br>1 May               | VI. Governmental institutions <ul style="list-style-type: none"><li>A. The separation of power</li><li>B. Representation and legislative structure</li><li>C. Institutional constraints</li><li>D. Participatory democracy</li></ul>  |

## Reading list

### Section I: Congestible public goods.

#### O. Public goods

Mas-Colell, Andreu, Michael D. Whinston and Jerry R. Green (1995) Microeconomic Theory, Oxford University Press, pages 359-364.

Cornes, Richard and Todd Sandler (1996) The Theory of Externalities, Public Goods and Club Goods, Cambridge University Press, 143-197.

#### I. Congestible public goods.

##### A. Introduction to club goods

Cornes, Richard and Todd Sandler (1996) The Theory of Externalities, Public Goods and Club Goods, Cambridge University Press, 347-369.

##### B. Club good extensions with homogeneous populations

Silva, Emilson C. D. (1997) "A-la-Carte or Smorgasbord? Multiproduct clubs with costly exclusion" Journal of Urban Economics, Vol. 41, No. 2, March, 264-280.

Conley, John and Manfred Dix (1999) "Optimal and equilibrium membership in clubs in the presence of spillovers", Journal of Urban Economics, 46, No. 2, September, 215-229.

##### C. Pricing congestible facilities

Gailmard, Sean and Thomas R. Palfrey (2005) "An experimental comparison of collective choice procedures for excludable public goods", Journal of Public Economics, Vol. 89, No. 8, August, 1361-1398.

Verhoef, Erik T. (2005) "Second-best congestion pricing schemes in the monocentric city", Journal of Urban Economics, Vol. 58, No. 3, November, 367-388.

##### D. Mixed clubs and institutional forms

Cremer, Helmuth and Jean-Jacques Laffont (2003) "Public goods with costly access", Journal of Public Economics, Vol. 87, Nos. 9-10, September, 1985-2012.

Jaramillo, Fernando, Hubert Kempf and Fabien Moizeau (2003) "Inequality and club formation", Journal of Public Economics, Vol. 87, Nos. 5-6, May, 931-955.

## E. Empirical treatments

Reiter, Michael (1999) “Public goods, club goods, and the measurement of crowding”, Journal of Urban Economics, Vol. 46, No. 1, July, 69-79.

Craig, Steven G. and Eric J. Heikkila (1989) “Urban safety in Vancouver: Allocation and production of a congestible public good”, The Canadian Journal of Economics, Vol. 22, No. 4, November, 867-884.

## Section II. Intra-jurisdictional externalities

### A. Local spatial spillovers

McMillen, Daniel P. And John F. McDonald (2002) “Land values in a newly zoned city”, The Review of Economics and Statistics, Vol. 84, No. 1, February, 62-72.

Safirova, Elena (2002) “Telecommuting, traffic congestion, and agglomeration: A general equilibrium model”, Journal of Urban Economics, Vol. 52, No. 1, July, 26-52.

### B. Agglomeration economies

Callois, Jean-Marc (2008) “The two sides of proximity in industrial clusters: The trade-off between process and product innovation”, Journal of Urban Economics, Vol. 63, No. 1, January, 146-162.

Fu, Shihe (2007) “Smart café cities: Testing human capital externalities in the Boston metropolitan area”, Journal of Urban Economics, Vol. 61, No. 1, January, 86-111.

Rosenthal, Stuart S. and William C. Strange (2003) “Geography, industrial organization and agglomeration”, The Review of Economics and Statistics. Vol. 85, No. 2, May, 377-393.

### C. Urban economic growth

Kaufmann, Daniel, Frannie Leautier and Massimo Mastruzzi (2005) Governance and the city: An empirical exploration into global determinants of urban performance, World Bank Policy Research Working Paper 3712, September, SSRN 545723.

Shapiro, Jesse (2006) ‘Smart cities: Quality of life, productivity, and the growth effects of human capital’, Review of Economics and Statistics, Vol. 88, No. 2, May, 324-335.

### D. Sprawl

Brueckner, Jan (2005) “Transport subsidies, system choice, and urban sprawl”,

Regional Science and Urban Economics, Vol. 35, No. 6, November, 715-733.

Irwin, Elena G. and Nancy E. Bockstael (2004) "Land use externalities, open space preservation, and urban sprawl", Regional Science and Urban Economics, Vol. 34, No. 6, November, 705-725.

E. Investments in infrastructure

Haughwout, Andrew F. (2002) "Public infrastructure investments, productivity and welfare in fixed geographic areas", Journal of Public Economics, Vol. 83, No. 3, March, 405-428.

Robinson, James A. and Ragnar Torvik (2005) "White elephants", Journal of Public Economics, Vol. 89, Nos. 2-3, February, 197-210.

### **Section III. Demand and supply of local public services**

A. The Tiebout mechanism

1. Tiebout incentives and equilibria

Bayer, Patrick and Christopher Timmins (2005) "On the equilibrium properties of locational sorting models", Journal of Urban Economics, Vol. 57, No. 3, May, 462-477.

de Bartolome, Charles A. M. and Stephen L. Ross (2007) "Community income distributions in a metropolitan area", Journal of Urban Economics, Vol. 61, No. 3, May, 496-518.

2. Private governments

Bowles, Samuel and Herbert Gintis (2002) "Social capital and community governance", Economic Journal, Vol. 112, Issue 483, November, F419-F436.

Helsley, Robert W. and William C. Strange (2000) "Potential competition and public sector performance" Regional Science and Urban Economics, Vol. 30, No. 4, July, 405-428.

3. Empirical Tiebout models

Bayer, Patrick, Fernando Ferreira and Robert McMillan (2007) "A unified framework for measuring preferences for schools and neighborhoods", The Journal of Political Economy, Vol. 115, No. 4, August, 588-638.

Rhode, Paul W. And Koleman S. Strumpf (2003) "Assessing the importance of Tiebout sorting: Local heterogeneity from 1850 to 1990", The American Economic Review, Vol. 93, No. 5, December, 1648-1677.

B. Capitalization

Haughwout, Andrew, Robert Inman, Steven Craig and Thomas Luce (2004) "Local revenue hills: Evidence from four U.S. cities", The Review of Economics and Statistics, Vol. 86, No. 2, May, 570-585.

Reback, Randall (2005) "House prices and the provision of local public services: capitalization under school choice programs", Journal of Urban Economics, Vol. 57, No. 2, March, 275-301.

C. Expenditures and services with citizen mobility

Grossman, Philip J., Panayiotis Mavros and Robert W. Wassmer (1999) "Public sector technical inefficiency in large U.S. cities", Journal of Urban Economics, Vol. 46, No. 2, September, 278-299.

Heinesen, Eskil (2004) "Determinants of local public school expenditure: A dynamic panel data model" Regional Science and Urban Economics, Vol. 34, No. 4, July, 429-453.

D. Taxation

1. Financing urban public services

Haughwout, Andrew F. And Robert P. Inman (2001) "Fiscal policies in open cities with firms and households", Regional Science and Urban Economics, Vol. 31, Nos. 2-3, April, 147-180.

Gill, Leroy H., Donald R. Haurin (2001) "The choice of tax base by local authorities: voter preferences, special interest groups, and tax base diversification", Regional Science and Urban Economics, Vol. 31, No. 6, November, 733-749.

2. Property taxation

Zodrow, George (2001) "The property tax as a capital tax: A room with three views", National Tax Journal, Vol. 54, No. 1, March, 139-156.

3. Business incentives and enterprise zones

Greenstone, Michael and Enrico Moretti (2003) "Bidding for industrial plants: Does winning a 'Million Dollar Plant' increase welfare?", NBER Working Paper 9844,

Cambridge, MA.

Haupt, Alexander and Wolfgang Peters (2005) “Restricting preferential tax regimes to avoid harmful tax competition”, Regional Science and Urban Economics, Vol. 35, No. 5, September, 493-507.

#### **Section IV. Intergovernmental competition**

##### **A. Fiscal competition and tax exporting**

Besley, Timothy and Anne Case (1995) “Incumbent behavior: Vote-seeking, tax setting, and yardstick competition”, The American Economic Review, Vol. 85, No. 1, March, 24-45.

Brueckner, Jan (2000) “A Tiebout/tax-competition model”, Journal of Public Economics, Vol. 77, No. 2, August, 285-306.

Hoxby, Caroline M. (2000) “Does competition among public schools benefit students and taxpayers?”, The American Economic Review, Vol. 90, No. 5, December, 1209-1238.

Perroni, Carlo and Kimberley A. Scharf (2001) “Tiebout with politics: Capital tax competition and constitutional choices”, Review of Economic Studies, Vol. 68, No. 1, January, 133-154,

##### **B. Spillovers**

Cohen, Jeffrey P. and Catherine J. Morrison Paul (2004) “Public infrastructure investment, interstate spatial spillovers, and manufacturing costs”, The Review of Economics and Statistics, Vol. 86, No. 2, May, 551-560.

Walsh, Randy (2006) “Endogenous open space amenities in a locational equilibrium”, Journal of Urban Economics, Vol. 61, No. 2, March, 319-344.

##### **C. Systems of local government, inequality and growth**

Andersson, Fredrik, Simon Burgess and Julia I. Lane (2007) “Cities, matching and the productivity gains of agglomeration”, Journal of Urban Economics, Vol. 61, No. 1, January, 112-128.

Duranton, Gilles (2007) “Urban evolutions: The fast, the slow, and the still”, The American Economic Review, Vol. 97, No. 1, March, 198-221.

Duranton, Gilles and Diego Puga (2001) “Nursery cities: Urban diversity, process

innovation, and the life cycle of products”, The American Economic Review, Vol. 91, No. 5, December, 1454-1477.

## **Section V. Federal structures**

### A. Local government hierarchies

Alesina, Alberto, Reza Baqir and Caroline Hoxby (2004) “Political jurisdictions in heterogeneous communities”, The Journal of Political Economy, Vol. 112, No. 2, April, 348-396.

Rubinchik-Pessach, Anna (2005) “Can decentralization be beneficial?”, Journal of Public Economics, Vol. 89, No. 7, July, 1231-1249.

### B. Fiscal federalism

Akai, Nobuo and Masayo Sakata (2002) “Fiscal decentralization contributes to economic growth: Evidence from state-level cross-section data for the United States”, Journal of Urban Economics, Vol. 52, No. 1, July, 93-108.

Arzaghi, Mohammad and J. Vernon Henderson (2005) “Why countries are fiscally decentralizing”, Journal of Public Economics, Vol. 89, No. 7, July, 1157-1189.

Zax, Jeffrey S. (1989) "Is There a Leviathan in Your Neighborhood?", The American Economic Review, Vol. 79, No. 3, June, 560-567

### C. Revenue sharing

Riou, Stephane (2006) “Transfer and tax competition in a system of hierarchical governments”, Regional Science and Urban Economics, Vol. 36, No. 2, March, 249-269.

## **Section VI. Governmental institutions**

### A. The separation of power

Persson, Torsten, Gerard Roland and Guido Tabellini (1997) “Separation of powers and political accountability”, The Quarterly Journal of Economics, Vol. 112, No. 4, November, 1163-1202.

### B. Representation and legislative structure

Persson, Torsten and Guido Tabellini (2004) “Constitutional rules and fiscal policy



outcomes”, The American Economic Review, Vol. 94, No. 1, March, 25-45.

Coate, Stephen and Brian Knight (2007) “Socially optimal districting: A theoretical and empirical exploration”, Quarterly Journal of Economics, Vol. 122, No. 4, November, 1409-1471.

Baqir, Reza (2002) “Districting and government overspending”, Journal of Political Economy, Vol. 110, No. 6, December, 1318-1354.

#### C. Institutional constraints

Poterba, James M. (1994) “State responses to fiscal crises: The effects of budgetary institutions and politics”, Journal of Political Economy, Vol. 102, No. 4, August, 799-821.

Besley, Timothy and Michael Smart (2007) “Fiscal restraints and voter welfare”, Journal of Public Economics, Vol. 91, Nos. 3-4, April, 755-773.

#### D. Participation

Matsusaka, John G. (1995) “Fiscal effects of the voter initiative: Evidence from the last 30 years”, Journal of Political Economy, Vol. 103, No. 3, June, 587-623.

## **Policies**

Campus policy regarding disabilities requires that faculty adhere to the recommendations of Disability Services. In addition, campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly accommodate all students who, because of religious obligations, have conflicts with scheduled examinations, assignments or required attendance. Any student eligible for and needing academic adjustments or accommodations because of disability or religious practice must arrange to meet with me immediately. Those with disabilities should immediately submit a letter from Disability Services describing appropriate adjustments or accommodations.<sup>2</sup>

Students and faculty share responsibility for maintaining an appropriate learning environment. Students who fail to adhere to appropriate behavioral standards may be subject to discipline. Faculty have the professional responsibility to treat students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which

---

<sup>2</sup> University policies regarding disabilities are available at [www.colorado.edu/disabilityservices](http://www.colorado.edu/disabilityservices). Disability Services can be contacted by telephone at 303-492-8671, or in person at Willard 322. Policies regarding religious practice are available at [www.colorado.edu/policies/fac\\_relig.html](http://www.colorado.edu/policies/fac_relig.html).

students express opinions.<sup>3</sup>

All students of the University of Colorado at Boulder are responsible for knowing and adhering to this institution's policy regarding academic integrity. Cheating, plagiarism, assistance to acts of academic dishonesty, fabrication, lying, bribery, and threatening behavior are examples of behaviors that violate this policy. All incidents of academic misconduct shall be reported to the Honor Code Council. Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions, including but not limited to university probation, suspension, or expulsion.<sup>4</sup>

---

<sup>3</sup> University policies regarding classroom behavior are available at [www.colorado.edu/policies/classbehavior.html](http://www.colorado.edu/policies/classbehavior.html) and at [www.colorado.edu/studentaffairs/judicialaffairs/code.html#student\\_code](http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code).

<sup>4</sup> The Honor Code Council can be contacted by email at [honor@colorado.edu](mailto:honor@colorado.edu) or by telephone at 303-725-2273. Additional information regarding the University Honor Code is available at [www.colorado.edu/policies/honor.html](http://www.colorado.edu/policies/honor.html) and at [www.colorado.edu/academics/honorcode/](http://www.colorado.edu/academics/honorcode/)