

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

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**Economics 8231**  
**Syllabus and Schedule**  
**16 April 2005**

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 Mondays and Wednesdays from 12:30 p.m. to 1:45 p.m. in Economics 5. I will hold regular office hours between 11:00 a.m. and 12:00 p.m. on Mondays and Wednesdays in my office, Economics 111. Appointments can be made for meetings at other times, if these are inconvenient.

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>1</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

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<sup>1</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>2</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>3</sup>

Performance in this class will be judged on the basis of several instruments. The final examination will take place on Wednesday, May 4th, from 1:30p.m. – 4:00p.m. It will require the full 2.5 hours and be worth 150 points. Any student who has three final examinations scheduled on 4 May and wishes to reschedule the final examination in this course must meet with me immediately.<sup>4</sup> A midterm examination will take place on 2 March, approximately at the end of section III.B. It will be worth 75 points.

In addition, all students will work on two short term papers, each outlining possible research projects. The first, due on approximately Monday, 14 February, must be no longer than three pages, and is worth 25 points. The second, due on Monday, 18 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.

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<sup>2</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>3</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/)

<sup>4</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**

- 10, 12, 19, 24, 26 January: I. Congestible public goods.  
A. Introduction to club goods  
B. Club good extensions with homogeneous populations  
C. Pricing congestible facilities  
D. Mixed clubs and institutional forms  
E. Empirical treatments
- 31 January, 2, 7, 9 February: II. Intra-jurisdictional externalities  
A. Local spatial spillovers and externalities  
B. Agglomeration economies  
C. Urban growth  
D. Sprawl
- 14, 16, 21, 23,  
28 February, 2 March III. Intergovernmental competition  
A. The Tiebout mechanism  
1. Tiebout incentives and equilibria  
2. Public and private provision
- 7 March: Midterm examination
- 9, 14, 16, 28 March: 3. Empirical Tiebout models  
B. Expenditures: Services and expenditures with citizen mobility  
C. Taxation  
1. Financing urban public services  
2. Taxation and capitalization  
3. Business incentives and enterprise zones  
4. Fiscal competition and tax exporting  
D. Spillovers: Peer effects and externalities  
E. Systems of local government, inequality and growth
- 30 March, 4, 6, 11, 13 April: IV. Federal structures  
A. Fiscal federalism  
B. Government hierarchies  
C. Revenue sharing
- 18, 20, 25, 27 April: V. Governmental institutions  
A. The separation of power  
B. Representation and legislative structure  
C. Institutional constraints  
D. Participatory democracy

## 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.

Arnott, Richard and Marvin Kraus (1993) "The Ramsey Problem for congestible facilities" Journal of Public Economics, Vol. 50, 371-396.

##### 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, 41, 264-280.

Conley, John and Manfred Dix (1999) "Optimal and equilibrium membership in clubs in the presence of spillovers", Journal of Urban Economics, 46, 215-229.

##### C. Pricing congestible facilities

Arnott, Richard and Marvin Kraus (1998) "When are anonymous congestion charges consistent with marginal cost pricing?" Journal of Public Economics, 67, 45-64.

Gailmard, Sean and Thomas R. Palfrey (forthcoming) "An experimental comparison of collective choice procedures for excludable public goods", Journal of Public Economics.

Mumy, Gene E. (1994) "Congestion tolling for uniform and nonuniform demand cycles when toll-revenue benefits are discounted" National Tax Journal, 47, 173-183.

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

Cremer, Helmuth and Jean-Jacques Laffont (2003) “Public goods with costly access”, Journal of Public Economics, Vol. 87, 1985-2012.

Jaramillo, Fernando, Hubert Kempf and Fabien Moizeau (2003) “Inequality and club formation”, Journal of Public Economics, Vol. 87, 931-955.

E. Empirical treatments

Borcherding, Thomas E. and Robert T. Deacon (1972) “The demand for the services of non-federal governments” The American Economic Review, 62, 891-901.

Reiter, Michael (1999) “Public goods, club goods, and the measurement of crowding”, Journal of Urban Economics, Vol. 46, 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, 867-884.

## **Section II. Intra-jurisdictional externalities**

A. Local spatial spillovers

Kemmerling, Achim and Andreas Stephan (2002) “The contribution of local public infrastructure to private productivity and its political economy: Evidence from a panel of large German cities”, Public Choice, Vol. 113, No. 3-4, December, 403-424.

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

Safirova, Elena (2002) “Telecommuting, traffic congestion, and agglomeration: A general equilibrium model”, Journal of Urban Economics, Vol. 53, July, 26-52.

B. Agglomeration economies

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.

Pfluger, Michael (2004) “A simple, analytically solvable, Chamberlinian agglomeration model”, Regional Science and Urban Economics, Vol. 34, September, 565-573.

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.

Wheaton, William C. And Mark J. Lewis (2002) "Urban wages and labor market agglomeration", Journal of Urban Economics, Vol. 51, May, 542-562.

C. Urban growth

Lin, Chu-Chia, Chao-Cheng Mai and Ping Wang (2004) "Urban land policy and housing in an endogenously growing monocentric city", Regional Science and Urban Economics, Vol. 34, May, 241-261.

Wallis, John Joseph and Wallace E. Oates (1988) "Does economic sclerosis set in with age? An empirical study of the Olson hypothesis", Kyklos, 41, 397-417.

D. Sprawl

Irwin, Elena G. and Nancy E. Bockstael (2004) "Land use externalities, open space preservation, and urban sprawl", Regional Science and Urban Economics, Vol. 34, November, 705-725.

### **Section III. Intergovernmental competition**

A. The Tiebout mechanism

1. Tiebout incentives and equilibria

Conley, John P. and Myrna H. Wooders (1997) "Equivalence of the core and competitive equilibrium in a Tiebout economy with crowding types", Journal of Urban Economics, 41, 421-440.

de Bartolome, Charles A. M. and Stephen L. Ross (2003) "Equilibria with local governments and commuting: Income sorting vs income mixing", Journal of Urban Economics, Vol. 54, September, 1-20.

Perroni, Carlo and Kimberley A. Scharf (2001) "Tiebout with politics: Capital tax competition and constitutional choices", Review of Economic Studies, Vol. 68, January, 133-154,

2. Private governments

Hart, Oliver, Andrei Shleifer and Robert W. Vishny (1997) "The proper scope of government: Theory and an application to prisons", Quarterly Journal of

Economics, Vol. , November, 1127-1161.

Helsley, Robert W. and William C. Strange (2000) "Potential competition and public sector performance" Regional Science and Urban Economics, Vol. 30, July, 405-428.

3. Empirical Tiebout models

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

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. Expenditures: Services and expenditures with citizen mobility

Alesina, Alberto, Reza Baqir and William Easterly (1999) "Public goods and ethnic divisions", The Quarterly Journal of Economics, November, 1243-1284.

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, September, 278-299.

Heinesen, Eskil (2004) "Determinants of local public school expenditure: A dynamic panel data model" Regional Science and Urban Economics, Vol. 34, July, 429-453.

C. 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, 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, November, 733-749.

2. Taxation and 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 (in press) "House prices and the provision of local public services: capitalization under school choice programs", Journal of Urban Economics.

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.

Tan, Lin-Ti and C.Y. Cyrus Chu (2002) "A generalized analysis of the effects of business taxes on the production location choice under uncertainty", Regional Science and Urban Economics, Vol. 32, March, 201-219.

4. 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, August, 285-306.

D. Spillovers: Peer effects and externalities

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.

Levinson, Arik (1999) "State taxes and interstate hazardous waste shipments", The American Economic Review, Vol. 89, No. 3, June, 666-677.

E. Systems of local government, inequality and growth

Davis, Donald R. and David E. Weinstein (2002) "Bones, bombs, and break points: The geography of economic activity", The American Economic Review, Vol. 92, No. 5, December, 1269-1289.

## **Section IV. 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.

Rubinichik-Pessach, Anna (forthcoming) “Can decentralization be beneficial?”, Journal of Public Economics.

### 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, July, 93-108.

Arzaghi, Mohammad and J. Vernon Henderson (forthcoming) “Why countries are fiscally decentralizing”, Journal of Public Economics.

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

Borck, Rainald and Stephanie Owings (2003) “The political economy of intergovernmental grants”, Regional Science and Urban Economics, Vol. 33, March, 139-156.

## **Section V. 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.

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.

D. Participation

Matusaka, 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.