14.573/14.51J

Cities and Regions: Urban Economics and Public Policy.

This course applies economic theory and formal models to the understanding of a range of planningpublic policy questions that exist in an urban-regional context. It is offered both for graduate credit and also undergraduate credit.

With either option an "intermediate" level understanding of economics is an absolute prerequisite. For undergraduates, that means you must be an economics major and have completed most core courses (hence juniors and seniors only). For graduate students (other than course 14) you should have been an economics major as an undergraduate – or alternatively taken lots of economics and/or mathematics. These prerequisites are necessary to absorb the reading list – consisting mostly of articles from Economic Journals.

The course requirements include a mid term and final exam, as well as 5 problem sets. The latter count 20% for the grade and the former 40 each. (All articles are located in the material section of the website – in PDF. format).

COURSE OUTLINE

I. The structure of Cities: Residential Land Use and Transportation (2/5, 2/7, 2/12, 2/14)

1. Land markets, land use, density

- 2. Congestion theory, Auto Bottlenecks, public Transportation
- EXERCISE: 2-mode congestion-investment model (2/14 2/21)
- II. Job Dispersal, Agglomeration, and Urban Labor Markets (2/21, 2/26, 2/28 no class on 2/19)
 - 1. Job Decentralization and wage variation
 - 2. Worker-firm job matching.
 - 3. Local labor market agglomeration, job clustering
- III. Segregation and the spatial concentration of urban poverty (3/5, 3/7)
 - 1. Alternative theories of spatial segregation
 - 2. Segregation and economic outcomes
 - EXERCISE: Multiple equilibrium (3/7 3/14)

IV. Urban Housing Markets (3/12, 3/15, 3/19)

- 1. Models of turnover, market transactions/friction.
- 2. Housing supply, durable capital, Redevelopment.
- 3. Tenure choice, labor mobility, defaults.

MID TERM (3/21, in class)

- V. Local governments, spatial externalities, land development controls (4/2)
 - 1. Land use externalities, market efficiency, zoning.
 - 2. Growth regulations, rent extractions
- VI. Tiebout, Sorting and Community competition (4/9, 4/11)
 - 1. Classical "club" models
 - 2. Competition with land markets
 - 3. Empirical tax capitalization
 - EXERCISE: location sorting with public goods (4/11 4/18)

VII. Local Public Goods: Law Enforcement and Schooling (4/18, 4/23, 4/25 - no class on 4/16)

1. Public Good supply versus demand

2. Private substitutes for Public Goods

3. Identifying productivity.

4. Spatial competition and Good spillovers.

EXERCISE: public choice with production functions (4/25 - 5/2)

VIII. Regional Growth, Agglomeration, Systems of Cities (4/30, 5/2, 5/7)

- 1. Regional economic growth, supply versus demand shocks.
- 2. Inter-regional equilibrium, convergence.
- 3. Systems of cities.
- 3. Agglomeration and increasing returns

IX. Interregional Tax/policy competition (5/9, 5/14, 5/16)

- 1. Tax and Policy competition models, Nash equilibrium.
- 2. Industrial development incentives, taxes, investment impacts.
- 3. Layers of government, grants, incentives, control
- EXERCISE: a 2-region model with differential taxation (5/7 5/10)

FINAL (week of 5/20)

READING LIST

I. The Structure of Cities: Land Use and Urban Transportation

Wheaton, William, "Residential Decentralization, Land Rents, and the Benefits of Urban Transportation Investment," <u>AER</u>, 67, 2, (March, 1977).

Duranton, G. and Matt Turner, "The Fundamental Law of Road Congestion", U. of Toronto, Department of Economics WP #370, (2009).

Arnott, R., A. de Palma, and R. Lindsey, "The Economics of a Bottleneck," Journal of Urban Economics, 27, (1990), pp 111-130.

Wheaton, William. "Land Use and Density in Cities with Congestion", <u>Journal of Urban</u> <u>Economics</u>, 43, 2 (1998) pp 258-272.

Nelson, Peter, et.al, "Transit in Washington DC: Current benefits and optimal level of provision", Journal of Urban Economics, 62,2 (September, 2007) pp231-252.

Randal O'Toole, "Defining Success: the Case against Rail Transit", Policy Analysis, 663, (March 24, 2010).

II. Job Decentralization Agglomeration and Urban Labor Markets

Timothy, Darren, W. Wheaton, "Intraurban Wage Variation, Employment Location and Commuting Times", Journal of Urban Economics, 50, 2 (September, 2001), pp 338-366.

Wheaton, William, "Commuting, Congestion and Employment Dispersal in Cities with *Mixed* Land Use", Journal of Urban Economics, 55,3, May 2004, pp 417-438.

McMillen, D. and S. Smith, "The Number of Subcenters in large Urban Areas", Journal of Urban Economics, 53, 3, (May, 2003), pp. 321-339.

Mathew Freedman, "Job Hopping, earnings dynamics and industrial agglomeration...", Journal of Urban Economics, 64 (2008), pp 590-600.

Jan Rouwendal, "Search Theory, Spatial Labor Markets and Commuting", <u>Journal of Urban</u> <u>Economics</u>, 43,1, January 1998, pp 1-22.

Gurley, Tami and Donald Bruce, "The effect of car access on employment outcomes for welfare recipients", <u>Journal of Urban Economics</u>, 58,2, September 2005, pp 250-272.

Marc Dudey, "Competition by Choice: the effects of Consumer Search on Firm Location", AER, 80,5 (1990) 1092-1104.

Brueckner, Jan "Inter-Store Externalities and Space Allocation in Shopping Centers," Journal of Real Estate Finance and Economics 7, 5-16 (July 1993).

Jenner, M. and Dirk Brounen, "The Effect of Clustering on Office Rents...", <u>Real Estate</u> <u>Economics</u>, 37, 2 (2009), 185-208

III. Ghettos, segregation and urban Poverty

Glaeser, E. M. Kahn, J. Rapapport, "Why do the poor live in cities, the role of public transportation", <u>Journal of Urban Economics</u>, 68, 2008, pp 1 - 24.

David Card, Andre Mas, Jesse Rothstein, "Tipping and the Dynamics of Segregation", <u>Quarterly Journal of Economics</u>, (2008. February), 177-218.

Rolland Benabou, "Workings of a city: Location, Education and Production", <u>QJE</u>, 108,3,(August, 1993).

Cutler, David, Glaeser, Edward L., "Are Ghettos Good or Bad", <u>Quarterly Journal of Economics</u>, 112,3, August 1997.

Ludwig, Jens, Greg Duncan and Paul Hirschfield, "Urban Poverty and Juvenile Crime: Evidence from a Randomized Housing Mobility Experiment", <u>QJE</u>, CXVI, 2 (2001) pp655-681.

Jacob, Brian, "Public Housing, Housing Vouchers & Student Achievement...", <u>American</u> <u>Economic Review</u>, 94, (1)1, (2004), pp 233a-258.

Ihanfeldt, K. and D. Sjoquist, "Job Accessibility and Racial Differences in Youth Unemployment Rates", <u>American Economic Review</u>, 80 (1990), pp 267-276.

Grauwin, Goffette-Nagot, Jensen, "Dynamic Models of Residential Segregation...", Journal of Public Economics, 96 (2012), 124-141

IV. Urban Housing Markets: Supply, Transactional Frictions, Tenure.

Arnott, R, "Housing Vacancies, Thin Markets, Idiosyncratic tastes.", <u>Journal Real Estate Finance</u> and Economics, Springer, vol. (2)1,(1989), pp 5-30. Per Lundborg, Per Skedinger, "Transaction Taxes in a Search Model of the Housing Market", Journal of Urban Economics, 45,2, March 1999.

Somerville, C. T., "The Industrial Organization of Housing Supply", <u>Real Estate Economics</u>, 27, 4, (1999) pp 669-695.

Joseph Gyrouko and Albert Saiz, "Reinvestment in the housing stock: the role of construction costs and the supply side", Journal of Urban Economics, 55,2, March 2004, pp 238-256.

Mayer, Chris, and Tsur Somerville, "Residential Construction: using the Urban Growth Model to estimate Housing supply", Journal of Urban Economics, 48,1 (2000) pp 85-109.

Bengte Evenson, "House Price Variation across Local Markets: a supply side view", University of Nevada at Las Vegas (December, 2004).

Rosenthal, Stuart and R. Helsley, "Redevelopment and the Urban Land Price Gradient", Journal of Urban Economics, 35, 2 (1994) pp 182-200.

Todd Sinai, N. Souleles, "Owner Occupied Housing as a hedge against Rent Risk", <u>QJE</u> (May, 2005), pp 763-789.

Jakob Munch, Michael Rosholm, Michael Svarer, "Home ownership, Job Duration and Wages", Journal of Urban Economics, 63, (2008), pp 130-145.

Green, R., G. Painter, M. White, "Measuring the Benefits of Home Owning: Child Outcomes redux", Research Institute for Housing America, (2012).

Ferreira, Gyourko, Tracey, "Housing Busts and Housing Mobility, an Update", NBER Working Paper # 17405, September 2011.

V. Development Restrictions and Land Use controls.

Speyrer, Janet, "The Effect of Land Use Restrictions on Market Values of Single Family Homes in Houston," Journal Real Estate Finance and Economics, 2,1989, pp 117-130.

Hans Koster, Jan Rouwendal, "The effects of mixed land use on Residential property Values", Tinbergen Institute Paper TI2010-105/3 (October, 2010).

Coulson, N.E. and Robin Leichenko, "The Internal and External Impact of Historical Designation on Property Values." Journal of Real Estate Finance and Economics, 23,1 (July, 2001), pp 113-124.

Thorsnes, Paul, "Internalizing Neighborhood Externalities: The effect of subdivision size and Zoning on Residential Lot Prices" Journal of Urban Economics, 48,3, November, (2000), pp 397-418.

Ihlanfeldt, Keith, "The effect of land use regulation on housing and land prices", Journal of Urban Economics, 61,3, (May 2007), pp420-436

Christian Hilber, Frederec Robert-Nicoud, "The Origins of Land Use Regulation: Theory and Evidence from US Metro Areas". IEB Working Paper2010/33, (2010).

VI. Tiebout, sorting and community competition

Wheaton, William, "Land Capitalization, Tiebout Mobility and the Role of Zoning Regulations," Journal of Urban Economics 34, 2 (1993), pp 102-117.

Christian Hilber, Chris Mayer, "Why Households without Children Support Public Schools Linking Capitalization to School Spending", Journal of Urban Economics, 65, (2009), pp 74-90.

William Wheaton, Nai Jia Lee. "Why Firms pay Higher Property Taxes under 'Classification'" MIT (Department of Economics), 2011.

Dennis Epple, Holger Sieg, "Estimating Equilibrium Models of Local Jurisdictions", <u>JPE</u>, 107, 4, (1999), pp 645-682.

Davidoff, Thomas, "Income Sorting, measurement and decomposition", <u>Journal of</u> <u>Urban Economics</u>, 58, 2, (September, 2005), pp 289-303.

Leah Tsoodle, Tracey Turner, "Property taxes and Residential Rents", <u>Real Estate</u> <u>Economics</u>, 36, 1 (2008), pp. 63-80.

VII. Local Public Goods: Schooling and Law Enforcement

Schwab, Robert, and Ernest Zampelli, "Disentangling the Demand Function from the Production Function for Local Public Services," Journal of Public Economics, 33, 2, (1987), 245-260.

Edward Lazear, "Educational Production", QJE, CXVI, 3 (2001), pp. 777-805.

Hoxby, Caroline, "Does Competition among Public Schools benefit Students and Taxpayers?" <u>AER</u>, 90, 5, (2000), pp. 1209-1239.

Rincke, Johannes, "Competition in the Public School Sector...", Journal of Urban Economics, 59,3,(May, 2006), pp 352-369.

Epple, Dennis and Richard Romano, "Public Provision of Private Goods", <u>JPE</u>, 104,1, (February, 1996).

Ferreyra, Maria, "Estimating the Effects of Private School Vouchers in Multidistrict Economies", <u>AER</u>, 97, 3 (June 2007), pp789-818.

Levitt, Steven, "The Effects of Prison Population on Crime Rates...", <u>QJE</u>, CXI (2) (May,1996).

Steven Levitt, "Using Electoral Cycles in Police Hiring to Estimate the Effect of Police on Crime," <u>AER</u>,87,3 (June, 1997), pp 270-291.

Scott Freeman, J. Grogger, Jon Sonstelie, "The Spatial Concentration of Crime", <u>Journal</u> of Urban Economics, 40,2 (1996), pp 216-231.

William Wheaton, "Metropolitan Fragmentation, Law Enforcement effort and urban crime", Journal of Urban Economics, 60,1 (2006), pp 1-15.

VIII. Regional Growth, Agglomeration, Systems of Cities.

Eeckhout, Jan, "Gibrat's Law for (all) Cities", <u>American Economic Review</u>, 94, 5 (December 2004), pp1429-1452.

Glenn Ellison, and Edward Glaeser, William Kerr, "What causes Industry Agglomeration? Evidence from Co-Agglomeration Patterns", <u>NBER Working Paper 13068</u>, April 2007.

Greenstone, Michael, R. Hornbeck, E. Moretti, "Identifying Agglomeration Spillovers, evidence from Million Dollar Plants", MIT Department of Economics (December, 2007)

Kim, S. "Labor Specialization and the Extent of the Market", JPE, 97, (1989).

Jeffrey Yankow, "Why do Cities Pay More?", Journal of Urban Economics, 60, 2 (2006) pp 139-161.

Roback, J. "Wages, Rents and the Quality of Life", Journal of Political Economy, Dec., 1982

Chen, Y., S. Rosenthal, "Local Amenities and Life Style Migration: Do People move for Jobs or Fun", Journal of Urban Economics, 63, 3 (2008), 519-537.

Stijn Van Nieuwerburgh, Pier Olivier-Weil, "Why has House Price Dispersion Gone up?", NBER 12538 (September, 2006).

Glaeser, E. and J. Gyrouko, "Urban Decline and Durable Housing", <u>Journal of Political</u> <u>Economy</u>, 113, 2, (2005) pp 345-375.

Eckhout, Jan, R. Pinheiro, K. Schmidheiny, "Spatial Sorting...", CESIFO Working Paper 3274 (December, 2010).

Ganong, P. and D. Shoag, "Why has Regional Convergence in the US Stopped?", Harvard Department of Economics (May, 2012).

IX. Interregional Tax and Policy competition, Governmental Layers

Holmes, Thomas, "The effect of State Policies on the Location of Manufacturing: Evidence from State Borders", Journal of Political Economy, 106, 4, (1998), pp 667-706.

Bucovetsky, S. "Asymmetric Tax Competition" Journal of Urban Economics, 30, (1991), 167-181.

Brian Knight, "State Gun Policies and cross-state Externalities...," NBER, Working Paper #17469, September 2011.

Wheaton, William, "Decentralize Welfare: Will there be Under provision? ", Journal of Urban Economics, 48, 3 (November, 2000), pp 536-555.

Per Fredriksson and D. Millimet. "Strategic Interaction and the Determinants of Environmental Policy across US States", <u>Journal of Urban Economics</u>, 51,1 (January 2002), pp 101-122.

Marko Koethenbuerger, "Revisiting the 'Decentralization theorem' - on the role of externalities" Journal of Urban Economics, 64, (2008), pp 116-122.

Thomas Nechyba, "Local Property Taxes and State Income Taxes, the Role of Competition and Collusion", JPE, 105, 2, 1997.

Brian Knight "Endogenous Federal Grants and Crowd out of State Government Spending", <u>American Economic Review</u>, 92, 1 (March 2002), pp 71-93.