

URBAN AND REGIONAL ANALYSIS: GEG 336

Gustavus Adolphus College

Spring Semester

Tuesday, Thursday 10:30-12:20 Nobel Hall 121

Instructor: Mark Bjelland

Office: Nobel Hall 101

Office Hours: MTWHF 11:30-12:20—or just stop by.

Course Objectives:

This course offers an in-depth exploration of the dynamics of urban and regional change through a combination of readings and spatial analysis using real-world datasets. The goal is to better understand the forces shaping the growth and change of cities and regions so that students become better informed citizens and are prepared for careers or professional training in urban and regional planning, geography and public policy. Readings will be supplemented by exercises designed to teach students the research methods used by geographers and urban planners as they use spatial analytical techniques to describe and understand urban and regional change. We will pay particular attention to urban issues in the rural Midwest and the Minneapolis-St. Paul metropolitan area. The course will be organized around these key themes and questions:

Globalization and Local Change

What do we mean when we speak of economic globalization? What is the role of urban and regional economies within the global economic order? How does globalization affect localities?

The Economics of Cities and Regions

What makes cities and regions grow or decline? Is there a future for retail in small towns and small cities? Why are some cities more prosperous when it comes to local government funding and what types of growth pay their own way and which do not. To answer some of these questions we shall explore methods of measuring the economic health of cities and regions.

Rural Change

How do changes in the agricultural economy affect small towns? What is the relationship between amenities and rural gentrification? Why are some rural areas losing population while others are growing rapidly. How do these changes affect the quality of life in rural communities?

Transportation, Land-Use, and Urban Design

How do transportation investments shape land use and how in turn to land-use patterns constrain transportation choices? What are the factors leading to suburban growth? Why are some core city areas in decline while others are experiencing gentrification? How does urban design influence the attractiveness of various environments and the transportation choices that people make? The New Urbanism movement calls for a fundamental revolution in the way we design cities in order to create communities that enhance sociability and reduce automobile dependency. We

shall explore methods of testing the relationships between urban design, travel behavior, and social interaction.

Spatial Analysis

This course introduces students to a variety of methods of spatial analysis techniques. We will use three software packages: Microsoft Excel, ArcView, and GeoDA. Through the class exercises, students will learn the basics of ArcView a geographic information system software package, some of the advanced capabilities of spreadsheets, and GeoDA. GeoDA is a powerful, spatial statistical data exploration package that uses ArcView shapefiles and has mapping and statistical display and analysis capabilities. The exercises will introduce students to point-pattern analysis, shift-share analysis, computation of segregation indices, regression analysis, and GIS-based analysis of urban form.

Prerequisite: Urban Geography (GEG-236) or equivalent. Introduction to GIS (GEG-340) would be useful.

Required Texts:

Sassen, Saskia. 1994. *Cities in a World Economy*. Thousand Oaks, CA: Pine Forge Press.

Jacobs, Jane. 1984. *Cities and the Wealth of Nations*. New York: Random House Vintage Books.

Gillham, Oliver, 2002. *Limitless City: A Primer on the Urban Sprawl Debate*, 2002. Coveto, CA: Island Press.

Reserve Readings:

Adams, J.S. and Barbara J. Vandrasek. 1999. "The Definition of Metropolitan Statistical Areas." *Urban Geography* 20(8): 695-726.

U.S. Census Bureau. 2002. "Census 2000: Geographic Products and Information." URL: <http://www.census.gov/geo/www/census2k.html>

Marcuse, Peter and Van Kempen, Ronald. "Introduction." in *Globalizing Cities: A New Spatial Order*. Oxford: Blackwell, pp. 1-21.

Haile and Beauregard, "The Inevitable Continuities of the City," in *Globalizing Cities: A New Spatial Order*. Oxford: Blackwell, pp. 22-36.

Galston, A. and Baehler, K. 1995. "Rural America in the 1990s: Trends and Choices." In *Rural Development in the United States*. Washington: Island Press, 7-22.

Furusest, Owen J. 1997. "Restructuring of Hog Farming in North Carolina: Explosion and Implosion," *The Professional Geographer*, 49(3): 391-403.

Nelson, Peter. 1997. Migration, sources of income, and community change in the non-metropolitan Northwest. *The Professional Geographer* 49(4): 418-430.

Johnson, Kenneth, and Calvin Beale. 1994. The recent revival of widespread population growth in nonmetropolitan areas of the United States. *Rural Sociology* 59(4).

Jakle, J., and Wilson, D., 1992. "Rural Decline." Chapter 6 in *Derelict Landscapes*. Rowman and Littlefield.

Hart, John Fraser and Lisa M. Rainey. 1998. "Redundant Farmsteads in Minnesota," *University of Minnesota Center for Urban and Regional Affairs Reporter*, 28(3): 1-6.

Beyers, W. and Nelson, P. 2000. "Contemporary development forces in the nonmetropolitan West: New insights from rapidly growing communities." *Journal of Rural Studies* 16(4): 459-474.

Hart, John Fraser, and John T. Morgan. 1995. "Spersopolis," *Southeastern Geographer*, 35(2): 103-117.

Dahms, F., and McComb, J., 1999. "Counterurbanization, interaction and functional change in a rural amenity area – a Canadian example." *Journal of Rural Studies* 15(2): 129-146.

Graff, T. 1998. The locations of Wal-Mart and Kmart supercenters: contrasting corporate strategies. *Professional Geographer* 50(1).

Gruidl, J., and Kline, S., 1992. "What happens when a large discount store comes to town?" *Small Town*, March-April: 20-25.

Robertson, K., 1999. "Can small-city downtowns remain viable? A national study of development issues and strategies." *Journal of the American Planning Association* 65(3): 270-284.

Mississippi State University Extension Service. 2004. "Understanding Your Trade Area: Implications for Retail Analysis." Publication No. 2321.

Adams, J.S. 1996. Metropolitan dynamics and the impoverishment of older central cities in the USA. In D. Barsch, W. Fricke, and P Meusbürger, eds. 100 Jahre Geographie an der Ruprecht-Karls-Universität Heidelberg (1895-1995). Heidelberg Geographische Arbeiten, No. 100. Heidelberg: University of Heidelberg, pp. 106-128.

Massey, D. and Denton, N. A., 1988, "The dimensions of residential segregation." *Social Forces*, 67:281-315.

Wong, D. W. S., 1997, "Spatial dependency of segregation indices." *The Canadian Geographer*, 41: 128–136.

Wong, D. W. S., 1998, "Measuring multiethnic spatial segregation." *Urban Geography*, 19: 77–87.

Wyly, E.K. and D. J. Hammel, 1999, "Islands of Decay in Seas of Renewal: Urban Policy and the Resurgence of Gentrification." *Housing Policy Debate*, 10: 711-771.

Schedule

Dates	Topic	Assigned Reading
Week 1		
2/6-2/10	Class introduction	None
	Changing definitions of cities, regions, metropolitan and micropolitan areas	Adams
	Tutorial: Spatial Analysis with GeoDA	
	<i>Exercise 1: Spatial Analysis of Minnesota's Population, 1970-2000</i>	
Week 2		
2/13-2/17	Economic globalization	Sassen 1
	Globalization and cities	Sassen 2-3, Marcuse
Week 3		
2/20-2/24	Centers of the global economy	Sassen 4-5
	Peripheral regions in the global economy	Sassen 6-7, Haile et al.
	Tutorial: Shift-Share Regional Economic Analysis	
	<i>Exercise 2: Shift-Share Analysis of Regional Economies</i>	
Week 4		
2/27-3/4	Models of metropolitan economies	Jacobs 1-2
	Exports and regional economies	Jacobs 3-5
Week 5		
3/7-3/11	Measuring the health of regional economies	Jacobs 6-9
	Towards healthy regional economies	Jacobs 10,12
Week 6		
3/14-3/18	Post-WWII changes in rural economies	Gaelston et al.,
	Rural population change	Johnson, Nelson
Spring Break Mar 25-Apr 2		
Week 7		
4/5-4/9	Rural decline	Jakle, Hart and Rainey
	Rural gentrification	Beyers, Dahms et al., Hart
	Mid-Term Take Home Exam	
Week 8		
4/12-16	Changing scale of retail geography	Graf, Gruidl and Klein
	Retail capture analysis	Robertson
	<i>Exercise 3: retail capture analysis for rural Minnesota</i>	
4/14-4/17 Easter Break		
Week 9		
4/19-4/23	Forces controlling growth in U.S. cities	Gillham 1-3

	Urban sprawl and consequences	Gillham 4-9
Week 10 4/26-4/30	Race, class and suburbanization Gentrification Tutorial: Spatial Lag and Spatial Error Regression Analysis <i>Exercise 4: quantitative measure of spatial segregation</i>	Wong (2), Massey et al. Wyly and Hammel
Week 11 5/3-5/7	Transportation, land-use and urban design Managing urban and regional change	Gillham 10-12 Gillham 13-15
Week 12 5/10-14	GIS analysis of urban form Urban growth simulations <i>Exercise 5: GIS evaluation of different urban development scenarios</i>	
Week 13 5/17	Student group presentations Class summary	

Final Exam May 22 in Classroom 10:00-12:00

Composition of Grade:

Reading Quizzes:	30%
Final Exam:	20%
5 Exercises:	50%
Discussion/participation	10%

Quizzes: Starting in week 2, there will be weekly quizzes on the assigned readings.

Exercises: There will be five exercises designed to teach methods of regional analysis and to explore the concepts discussed in the lectures and readings. These exercises are the single largest component of your grade. Each exercise will be written up in the format of a formal research paper.

Discussion/Participation: This course will only reach its potential if you stay current in the reading and actively engage in class discussions. Attendance and engagement in discussions will determine your discussion/participation grade.

Make-Up and Late Assignment Policies: You are responsible for turning in assignments at the proper time and taking quizzes at the scheduled time. Late assignments will be penalized at a rate of 10 percent per working day, unless you have legitimate difficulties and have made previous arrangements with the instructor. There is no make-up for missed quizzes. Instead, you will be allowed to drop the scores of your two lowest quizzes.

Academic Integrity Policy: Students are expected to be familiar with and adhere to the college standards and policies set forth in the college catalog.