## **URBAN AND REGIONAL ECONOMICS**

W. A. Schaffer Econ 4421 Spring 2016 MWF 2

TEXTS: (1) lecture notes by instructor, both in the Electronic Reserves and available from instructor in book format (.pdf) ready for copying (based primarily on *"Economic Impact Models"* in *The Web Book of Regional Science*, at <u>http://www.rri.wvu.edu/WebBook/Schaffer/index.html</u>)</u>, (2) various readings on location and urban economics, also in the Electronic Reserves, and (3) more references from the *Web Book of Regional Science* and other web sites, as needed. Materials held in the Electronic Reserves can probably be printed by GT Central Printing at no charge provided sufficient lead time is allowed.

## **Course Description**

Urban and regional economics are concerned with space, location, and distance in economics. This course approaches these issues in three stages.

First, we examine <u>regional economic models</u> in which distance is only a separating factor. Particular attention is paid to economic-base models, interregional multiplier models, regional and interregional input-output models, and growth models. In addition, we examine the determinants of regional growth with such empirical tools as location quotients and shift-share analysis, and we consider problems associated with regional public policy. The emphasis in this first section is on developing a simple framework for understanding the major aggregate economic models of regions, and how they are constructed and used. We progress from an elementary algebraic model to more complex ones by simple analogy with the intent of making the modeling process easily manageable.

Second, we look briefly at the determinants of industrial and household <u>location</u>. Transportation and processing costs become important here as well as the economies of agglomeration. We review the importance of these factors as well as their diminution over time.

Third, in what is commonly called "<u>urban economics</u>," we examine the concentration of people and activities in cities along with the resulting problems and patterns. We establish the arena with a review of the determinants of economic location, of the market forces underlying the development of cities, and of urban land-use patterns. With this background, we then examine the struggle to allocate resources under conditions where the economies of agglomeration are evident and spillovers or externalities lead to social costs and benefits unanticipated by markets. Time permitting, we focus on issues regarding poverty, housing, suburbanization, local governments, transportation, education, and crime.

## **Course Information**

**Text and readings.** The course is based on lecture notes (derived in a continued updating of the web book on regional economic models) and selected references in urban economics. These notes will be available in electronic files from the on-line reserves of the Georgia Tech Library and through other sites on the Web. You are encouraged to go to the Library and look through the books and journals from which these ideas are drawn. Books are interesting, and the original contexts of ideas always yield insights far more useful than textbooks in mastering topics of interest.

**Participation.** You are expected to read scheduled assignments before class and to participate in class discussions regularly. Although I am convinced that any Georgia Tech student can easily apply simple mathematics to an understanding of economic models, I also believe that classroom interaction can be a worthwhile experience.

**Schedule.** The attached schedule is tentative, but should hold until mid-term. Revisions of topics and assignments will be made as necessary.

**Quizzes and examination.** Test instruments will include three quizzes and the final exam. They will consist primarily of short-answer discussion questions and problems of the type found in the web book and in the supplementary question list for the course.

**Grades.** The quiz grades will be curved; the course grade will not be. Your course grade will be determined with equal weights for each of your three highest test grades.

Attendance. Attendance is not required. It is, of course, desired. You are expected to keep up with all schedule changes and with discussions in class; note that material may appear on quizzes without printed support.

**Process.** Your work is expected to be your own. You may use any legally and honorably obtained (not stolen) sources you wish in studying for this course. You are, in fact, encouraged to talk about our topics with friends, other students, professors, and even parents. Our goal is to become conversant on the economics of small areas.

**Office hours.** My base is in the Old Civil Engineering Building, and my office hours are erratic. I prefer to have office hours informally and immediately after class (or at baseball games). If you wish to make a formal appointment, call at 678-517-9726 or see me after class; I would be pleased to address any issues you may have..

	Economics 4421, Tentative Schedule January 11, 2016					
Meeting		Date		Торіс	Assignment	
1	Μ	Jan.	11	Organization		
2	W		13	Introduction, the place of space, definitions	L1	
3	F		15	The concept of region	L2	
4	Μ		18	MLK Day		
5	W		20	Some definitions of regions	L2	
6	F		22	Some maps and illustrations of regions	L2	
7	Μ		25	Economic-base models	L3	
8	W		27	Economic-base exercises (homework 1)	L3	
9	F		29	Empirical tools: location quotients and CBP data	Note A	
10	Μ	Feb.	1	Review		
11	W		3	Empirical tools: mapping program and data	Н	
12	F		5	Quiz 1		
13	Μ		8	Regional input-output tables and linear algebra, quiz results	L4	
14	W		10	Regional input-output models and multipliers	L5,6	
15	F		12	Interregional models: structure and development	H, L7	
16	Μ		15	Interregional models: use in Canada	H, L7	
17	W		17	Commodity-by-industry models	L8,9	
18	F		19	Exercises	Н	
19	Μ		22	Regional growth theories	L11	
20	W		24	Regional growth models	L10	
21	F		26	Building input-output models	L11	
22	Μ		29	Review		
23	W	Mar.	2	Quiz 2		
24	F		4	Quiz results		
25	Μ		7	Industrial location determinants and patterns	R	
26	W		9	Industrial location determinants and patterns	R	
27	F		11	The nature of urban economics	Н	
28	Μ		14	Why do cities exist?	R	
29	W		16	Agglomeration and external economies	R	
30	F		18	Exercise on comparative advantage	R	
31	Μ		21	Break		
32	W		23	Break		
33	F		25	Break		
34	Μ		28	Urbanization and comparative advantage	R	
35	W		30	Urban patterns, median location, spatial competition	R	
36	F	Apr.	1	Exercise, no class	R	
37	Μ		4	History of Western urbanization	R	
38	W		6	History of Western urbanization	R	
39	F		8	Agglomeration, external economies, and commons	R	
40	Μ		11	Land rent and land use, present value, single tax	R	
41	W		13	Local government issues and unbalanced growth	R	
42	F		15	Local government issues and unbalanced growth	Н	
43	Μ		18	Voting with your feet, sprawl	R	
44	W		20	Quiz 3		
45	F		22	Quiz results		
46	Μ		25	Recapitulation		
47	W		27	Recapitulation		
48	F		28	Recapitulation		
49	W	May	4	Final examination scheduled for Wed., April 29, 11:30-2:20		
	Assignment abbreviations: L - Lecture, N - Note, H - Handout, R - Reading					
AS	AS 3 1/10/					