

# URBAN AND REGIONAL ECONOMICS

W. A. Schaffer  
Econ 4421

Spring 2012  
MWF 2, IC 111

**TEXTS:** (1) Lecture notes by instructor, on GT Library Reserve, (2) other readings on Library Reserve, (3) "*Economic Impact Models*" in *The Web Book of Regional Science*, <http://www.rri.wvu.edu/WebBook/Schaffer/index.html>, and (4) more references from the *Web Book of Regional Science* and other web sites. (The web site at West Virginia University makes significant works on regional issues available at no charge.)

## 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 regional economic models 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.

Second, we look briefly at the determinants of industrial and household location. 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 "urban economics," 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 and local governments, transportation, education, and crime.

## Course Information

**Text and readings.** The course is based on lecture notes (derived from 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 the 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 weights of 25 percent each for 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; 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 office is Room 101, Old Civil Engineering Building, and my office hours are 3-4 MWF if you wish an arranged, formal visit.. However, I prefer to have office hours informally immediately after class (or at baseball games) since I am on campus erratically. If you wish to make a formal appointment, call at 678-517-9726 or see me after class.

**Economics 4421, Tentative Schedule January 9, 2012**

| ng  | Date | Topic  | Assignment |
|-----|------|--|------------|
| M   | Jan. | 9 Organization   | --         |
| W   |      | 11 Introduction, the place of space, definitions                   | L1         |
| F   |      | 13 The concept of region   | L2         |
| M   |      | 16 No class -- MLK day   | --         |
| W   |      | 18 Some definitions of regions                                     | L2         |
| F   |      | 20 Some maps and illustrations of regions                          | L2         |
| M   |      | 23 Economic-base models  | L3         |
| W   |      | 25 Economic-base exercises (homework 1)                            | L3         |
| F   |      | 27 Economic-base models  | L3         |
| M   | Feb. | 30 Empirical tools: location quotients and CBP data                | Note A     |
| W   |      | 1 Empirical tools: mapping program and data                        | H          |
| F   |      | 3 Quiz 1   | --         |
| M   |      | 6 Regional input-output tables and linear algebra, quiz results    | L4         |
| W   |      | 8 Regional input-output models                                     | L5         |
| F   |      | 10 Exercises   | L6         |
| M   |      | 13 Regional multipliers  | L6         |
| W   |      | 15 Interregional models  | L7         |
| F   |      | 17 Commodity-by-industry models                                    | L8,9       |
| M   |      | 20 Regional growth theories  | L11        |
| W   |      | 22 Building input-output models                                    | L10        |
| F   |      | 24 Regional growth models  | L11        |
| M   |      | 27 Review  | --         |
| W   |      | 29 Quiz 2  | --         |
| F   | Mar. | 2 Quiz results   |            |
| M   |      | 5 Industrial location determinants                                 | L11        |
| W   |      | 7 Industrial location patterns                                     | L11        |
| F   |      | 9 The nature of urban economics                                    | H          |
| M   |      | 12 Why do cities exist?  | H          |
| W   |      | 14 Agglomeration and external economies                            | H          |
| F   |      | 16 Comparative advantage and urbanization                          | H          |
| M   |      | 19 Break   | --         |
| W   |      | 21 Break   | --         |
| F   |      | 23 Break   | --         |
| M   |      | 26 Location patterns, median location, spatial competition         | H          |
| W   |      | 28 Location patterns, median location, spatial competition         | H          |
| F   | Apr. | 30 Why cities?   | H          |
| M   |      | 2 History of Western urbanization                                  | H          |
| W   |      | 4 History of Western urbanization                                  | H          |
| F   |      | 6 Agglomeration, external economies, and commons                   | H          |
| M   |      | 9 Agglomeration, external economies, and commons                   | H          |
| W   |      | 11 Land rent and land use, present value, single tax               | H          |
| F   |      | 13 Local government issues and unbalanced growth                   | H          |
| M   |      | 16 Voting with your feet, sprawl                                   | H          |
| W   |      | 18 Quiz 3  | --         |
| F   |      | 20 Quiz results  | --         |
| M   |      | 23 Recapitulation  | --         |
| W   |      | 25 Recapitulation  | --         |
| F   |      | 27 Recapitulation  | --         |
| Th. | May  | 2-6 <b>Final examination scheduled for Wed., May 2, 11:30-2:20</b> | --         |

Assignment abbreviations: L - Lecture, N - Notes, H - Handouts and Readings