COURSE DESCRIPTION

This course is a survey of modern urban economics. We shall examine the microeconomics of the structure of cities and housing markets; economic theories addressing how, why and where cities form; the history and dynamics of the urban economy; and the role of government policy in correcting for market failures in the urban economy. We use urban economics as a vehicle for learning how to think like economists.

According to the official listing, this is a 4011 prerequisite course. However, the course is self-contained, so it is possible to take this course without having taken 4011. *Students who have not taken 4011 will probably find themselves at a disadvantage relative to those who have taken 4011.* Knowledge of intermediate microeconomic theory (Economics 4011) or econometrics (Economics 413) would be helpful and would make this course easier to comprehend. Knowledge of basic calculus (Math 121-122 or 131-132) would also greatly facilitate comprehension of the material. Finally, the material covered in a public finance course (Economics 445) is quite complementary to the material we cover in this course.

**WARNING:** As students who have taken this course previously have noted, I expect a lot from you, but I also know that you are quite capable. In particular, we will use extensively modern economic theory, *mathematics*, and econometrics. In that sense, this is a quantitative course that will borrow and use material from many other areas. So it is integrative, but it will also be challenging. This course is not for everyone. If you don’t have the appropriate background, it will be necessary for you to put in time and effort to learn what you need. It would be impossible to give the formal prerequisites for this course, as we use bits and pieces from many other courses, so the list would be long. But we will not use all the material from any particular course or area.

COURSE REQUIREMENTS AND GRADES

By the end of this course, you are expected to understand the basic theory of urban economics, the economic history and dynamics of city structure, and the role of public policy in the urban economy. There will be four homework sets during the term, each worth 5% of the grade (for a total of 20%). Exam 1, worth 40% of the grade, will be given in class near the middle of the term. *Exam 2 is scheduled for the last class meeting on Wednesday, December 3,* and is worth 40% of the grade. There will be 500 total points possible in the
course. Points will be allocated to homework sets and exams according to their respective percentages. The course will be curved so that the mean total points (out of 500) will be approximately a borderline A-/B+ grade. Thus, only points matter. Letter grades for the individual exams and homework will not be assigned.

**WARNING:** Students taking my courses in the past have often waited until the last moment to begin work on their homework, and as a consequence have found that they have had insufficient time to complete it. Urban economics problems are generally much more difficult than they might appear to be at first glance. You will have approximately two weeks to complete each homework set.

In order to preempt many questions that often arise after the final exam, the following information will be of use. To be fair, no opportunity will be given to any student in the class that is not offered to all students. It is also desirable to have a course that actually terminates. Thus, there will be no extra credit beyond the 500 points in the course, no extra papers for the course, and no exam retakes. Grades are based on performance in the course, not on need.

**OFFICE HOURS**

My office is located at 387 Seigle. My phone is 935-8486. My e-mail address is berliant@artsci.wustl.edu; I am happy to answer questions via e-mail.

Office hours are Tuesdays 3-4 PM, Wednesdays 1 - 2 PM and by appointment.

The TA for the course will be Yu-Hung Chen. His e-mail address is yu-hung.chen@wustl.edu and his office hours are Mondays 1-2 PM in Seigle 358. The functions of the TA will be to grade homework sets, to help grade exams, to hold office hours, and to maintain the course web page.

**READINGS**

The homework and exams will based on both the lectures and readings, but **primarily on the lectures**. Thus, it is important to attend the lectures.

I have used the two best-known texts available for undergraduate urban economics, one by O’Sullivan and the other by Mills and Hamilton, when I have taught the course previously. Students have used very colorful language to describe these texts, so I have followed their advice and not ordered either. Instead, we will use a relatively new book for the course. It is available in both hard cover and paperback, but I have ordered the paperback. I use it with some
trepidation. There is no text that covers theory the way I would like, that is at a level appropriate to your talents, and that is at the cutting edge of current research. The new book says (p. xxv) that it is an attempt “to fill this large gap between urban economics at the sophomore level and at the PhD level.” I think that they have done a good job, though I am clearly biased since I have an essay in the book with one of my students. (Please note that although I have an essay in the book, all I get out of that is two free copies, one hardcover and one paperback.) It’s not really a text, but a collection of essays.


This is not going to be a best-seller, because you are the target audience, and few institutions have undergraduates like you. But the book does not even attempt to cover some important topics, for example the New Economic Geography. To supplement it, I have put together a relatively short reader for the course that covers important and contemporary issues, though it is not perfect since it is not as broad as the course. It is now available (at cost) in the Economics Department office. The price is $10, and the secretaries require cash and exact change.

Many of the articles in the reader come from recent issues of journals, so perhaps I am expecting a lot from undergraduates. Nevertheless, the students who took the course previously seemed to get more out of the original articles than out of the textbooks. Please give it a chance and some time. Students have remarked that it takes a while to get used to having a reader instead of a text, but in the end, they liked the reader. *I strongly recommend that if you plan to purchase any materials for the course, that you purchase the reader first.*

The first supplementary text will be used to bridge theory to the real world.


We will use an interesting supplementary book to examine the history and development of one particular city, Chicago.


Both of these books are on reserve at the library.

You should use all of these readings to supplement and clarify lectures.

A list of topics and associated readings follows. We will not spend exactly one lecture on each topic or sub-topic, nor will we cover *A Companion to Urban Economics* in its entirety.
Note: In the past, students have suggested that someone type up the course notes and post them on the course web site. This is a good and interesting suggestion as a substitute for a text. I experimented with it in a graduate course. There are two issues, one major and the other minor. The major issue is that, in spite of our best efforts, there were errors in the notes. Even worse, they made their way into students' exam answers. Big mess. The minor issue is that students often ask questions in class, leading to digressions or discussions of material I didn't intend to cover. Thus, the notes are generally incomplete. If this material appears on an exam or homework, there are complaints.
LECTURE OUTLINE AND READINGS

[Chapters in brackets refer to chapters in the Arnott and McMillen book.]
[Authors in brackets refer to articles in the reader; they appear in the reader in the order listed below.]
Unbracketed readings refer to the supplementary books.

0. Organizational Matters

I. The Basic Material

A. Introduction, Overview, and Questions to be Addressed

1. Questions
2. Overview and Introduction [Ch. 1, 3]

B. A Review of Microeconomic Theory [Ch. 7.2]

C. Urban Economic Theory

1. Land in General Equilibrium
2. The Alonso Model [Ch. 7]
3. The Monocentric City Model [Ch. 6], [Fujita, section 1]
4. Empirical Connections [Ch. 14], [Coulson], [Carlin and Coulson]
5. Suburbanization (again) [Mieszkowski and Mills, pp. 138-147], [Rappaport]
6. The Hotelling Model [Hotelling]
7. The Starrett Model [Fujita, pp. 113-114]
8. The New Economic Geography [Krugman], Krugman book (Chapter 1, Appendix A)

D. Cities: The Historical Record and Reconciliation with the Theory

1. Chicago Cronon (Part I and Chapter 6)
2. The Rank-Size Rule [Gabaix]
3. Some Remarks on the History of Cities in the U.S. [Ch. 5]
4. European vs. U.S. Cities [Ch. 4]
5. Measuring Quality of Life in Cities [Ch. 28]

II. Market Failures and Public Policy in the Urban Economy

A. Introduction - Where We Are Going
B. Housing [Ch. 9]
C. Urban Transportation [Ch. 15, 17]
D. Local Governments, Local Public Goods and Land Use Controls: The Tiebout Hypothesis [Ch. 21]

1. Theory
2. Property Taxation
3. Equity and Tiebout [Inman and Rubinfeld]

E. Inner Cities: Putting Everything Together [Ch. 31], [Mills and Lubuele]