

URBAN ECONOMICS: ECONOMICS OF CITIES (ECON 4242)  
Department of Economics, University of Colorado  
Fall 2015

Classtime:	M, W, F: 10:00 - 10:50 am	Room: ECON 117
Professor:	Charles de Bartolome	Office: ECON 203
Office hours:	Mon 2:15 - 3:15 pm; Tu 9:15-10:15 am; Fri 2:15 - 3:15 pm.	e-mail: <a href="mailto:debartol@colorado.edu">debartol@colorado.edu</a>

*Textbook:* Arthur O'Sullivan: *Urban Economics* (8<sup>th</sup> Edition). McGraw-Hill Irwin.

*Clickers* Each student must buy a *i>clicker*. If you do not already own one, an *i>clicker* may be purchased at the University of Colorado bookstore. Clickers will be used to give class problems which will be scored.

Clickers should be registered at: [myCUinfo.colorado.edu](http://myCUinfo.colorado.edu)  
Register using your Identity Login not your student ID.

*Course description:*

The U.S. is an urban country, with 80% of the population living in urban areas. This course considers the economic forces which drive households and jobs to congregate in metropolitan areas and thereby create cities. It then considers the forces within the city which determine how the established cities “look” - how rents vary with location, the distribution of jobs and households within a city, urban sprawl, and the sorting of households between neighborhoods. Finally it considers some government policies relating to land use and housing.

*Pre-requisites:*

Intermediate Microeconomics, ECON 3070;  
Introduction to Statistics with Computer Applications, ECON 3818.

*Course Assignments and Desire2Learn:*

All course assignments, problem sets and some lecture notes are posted on the Desire2Learn at: <http://learn.colorado.edu> .

Please note that six pages of each Adobe Acrobat file can be printed on a single sheet by clicking as: Print>Properties>Multipage>6

*Attendance at class:*

Woody Allen once remarked: "90% of success is just turning up". The best way to learn the material is to attend class. Reading the lecture notes posted on the web is not a good substitute for attendance. Attendance at class is expected and required.

*Administrative Drop:*

Because attendance is important and is expected, I will drop from the class any student who neither attends one of the first three classes of the term nor gets special permission from me for his/her absence.

*Problem Sets:*

Problem sets with answers are listed under each topic on the syllabus. The problem sets are an integral part of the course. They are designed to help you use the material and a significant part of the exams will closely follow their format.

Although the answers to the problem sets are posted, I encourage you to make a real effort to solve the problem before you check the answer.

There are many questions at the end of each chapter in the textbook. I encourage you to work through the questions which relate to the material covered in class (I will post a list of these questions on Desire2Learn).

*Grading:*

There will be two midterms, a final exam, in-class clicker questions and paper summaries. Your grade will be determined as:

25%	First Midterm
30%	Second Midterm
30%	Final
8%	In-class clicker questions.
7%	Paper summaries

Concerning in-class clicker questions. I will use clicker questions to reinforce the main point of a lecture. Each correct answer will receive 1 point, and an absence or an incorrect answer will receive zero points. In calculating your total score for all in-class clicker questions, I will sum your scores for all days, omitting your three lowest daily scores.

Concerning the paper summaries. One of the objectives of this course is to introduce you to how economic knowledge is created and distributed (research). As a way of doing this, I will present some research papers. You are required to read

the paper before I present it and complete a summary sheet which is to be given in before the presentation.

*Exams:*

The two midterms will be given in the evening as:

FIRST MIDTERM:	Monday 21 Sept in	7:00 p.m. - 8:40 p.m.
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SECOND MIDTERM:	Monday 2 Nov in	7:00 p.m. - 9:00 p.m.
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The final exam will be held as:

FINAL:	Wednesday 16 Dec in ECON 117	4:30 p.m. - 7:00 p.m.
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You must bring two blue-books to each exam.

Because this is a 4000-level class, the exams will not just repeat material covered in class. Some questions will follow the material covered in class and in the problem sets, but some will ask you to apply the material in a different environment.

*Failure to be present at an exam:*

If you are unable to take an exam because of illness *and* have a medical note from your doctor to confirm this, you may take a make-up. Otherwise, unless you have obtained my prior permission to take the make-up, failure to be present for an exam will cause your score to be 0 for that exam.

*Using Clickers:*

I consider it cheating if a student uses another student's clicker.

You get a green light when your answer is registered. If you get a red light, your clicker is not registering and your score is automatically zero.

*Classroom courtesy:*

Please turn your cell 'phone off prior to the start of class.

I believe that learning is enhanced if there is full concentration by both the instructor and the student. To facilitate this, laptops may only be used in the front two rows of the classroom and usage of laptops in class is restricted to following the course notes.

*Students with Special Needs:*

If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner so that your needs may be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671; Center for Community Building, Room N200; or <http://disabilityservices.colorado.edu>

If you have a temporary medical condition or injury, please see the guidelines at: <http://disabilityservices.colorado.edu>

Disability Services' letters for students with disabilities indicate legally mandated reasonable accommodations.

*Religious Observances:*

Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, please let me know in a timely manner if one of the exam dates falls on a religious holiday you intend to observe and I will arrange for you to take a make-up. See policy details at:

[http://www.colorado.edu/policies/fac\\_relig.html](http://www.colorado.edu/policies/fac_relig.html)

*Classroom Behavior:*

Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at

<http://www.colorado.edu/policies/student-classroom-and-course-related-behavior>

And at:

<http://www.colorado.edu/studentaffairs/studentconduct/index.html>

*Academic Integrity:*

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct

shall be reported to the Honor Code Council ( [honor@colorado.edu](mailto:honor@colorado.edu) ; 303-735-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at: <http://www.colorado.edu/policies/honor.html> and at <http://honorcode.colorado.edu>

*Discrimination and Harassment Policy:*

The University of Colorado at Boulder is committed to maintaining a positive learning, working, and living environment. The University of Colorado does not discriminate on the basis of race, color, national origin, sex, age, disability, creed, religion, sexual orientation, or veteran status in admission and access to, and treatment and employment in, its educational programs and activities. (Regent Law, Article 10, amended 11/08/2001). CU-Boulder will not tolerate acts of discrimination or harassment based upon Protected Classes or related retaliation against or by any employee or student. For purposes of this CU-Boulder policy, “Protected Classes” refers to race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, or veteran status. Individuals who believe they have been discriminated against should contact the Office of Discrimination and Harassment (ODH) at (303) 492-2127 or the Office of Student Conduct (OSC) at (303) 492-5550. Information about the ODH, the above referenced policies, and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at <http://hr.colorado.edu/dh/Pages/default.aspx>

## COURSE OUTLINE

<u>Approximate Date</u>	<u>Topic</u>	<u>Chapter</u>
1. INTRODUCTION		
24, 26 Aug	INTRODUCTION Fundamental Questions of Urban Economics The need for a model Descriptions of urban areas “Five Axioms of Urban Economics” Discussion of regression analysis - the hedonic regression of house prices	1
*28 Aug	Kain, J., and J. Quigley, (1970), “Measuring the value of housing quality,” <i>Journal of American Statistical Association</i> <u>65</u> , 532-548.	
2. THE REASON FOR CITIES		
31 Aug, 2, 4, 9 Sept	THE EXISTENCE OF CITIES The importance of returns to scale - trade cities - factory cities - resource cities  <i>Problem Set: Trade Cities</i> <i>Problem Set: Factory Cities 1</i> <i>Problem Set: Factory Cities 2</i> <i>Problem Set: Resource Processing Cities 1</i> <i>Problem Set: Resource Processing Cities 2</i>	2
11,14,16 Sept	THE EXISTENCE OF CITIES: CLUSTERING Why firms cluster - input sharing - shared customer base - labor pooling -better skill matching -knowledge spillovers	3

Why households cluster  
- joint labor supply  
- mentor matching  
- social matching

\*18 Sept Carlton, D.W., (1983), "The location and employment choices of new firms: an econometric model with discrete and continuous endogenous variables," *Review of Economics and Statistics* 65, 440-449.

*Problem Set: Input Sharing*  
*Problem Set: Labor Pooling*  
*Problem Set: Skill Matching*  
*Problem Set: Social Matching*

21 Sept Review  
FIRST MIDTERM (7:00 - 8:40 pm in )

### 3. METROPOLITAN POPULATION AND JOBS

23, 25 Sept	POPULATION SIZE	4
	Jobs	
	Standard of Living Model	
	- Equilibrium City Size	
	Limiting Growth	pp. 239-247
	- urban growth boundary	
	- limiting building permits	
	- development fees	

*Problem Set:* Equilibrium City Population

*Problem Set:* Urban Growth Boundary

28,30 Sept	URBAN GROWTH	
2 Oct	Role of human capital	(omit
		Appendix)
	Urban growth	
	Employment multiplier	

*5 Oct	Helms, L.J., (1985), "The effect of state and local taxes on economic growth: a time-series cross-section approach," <i>Review of Economics and Statistics</i> <u>67</u> , 574-582.
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*Problem Set:* Spreading beneficial effects

*Problem Set:* Metropolitan Development Policy

### 4. LAND USE PATTERN

7,9,12,14 Oct	BID-RENT CURVES	6
	Capitalization	(omit pp. 141-142, 156-160)
	"Left-over principle"	
	- bid-rent for agriculture	
	- bid-rent for manufacturing firms	
	- bid-rent for offices	
	- bid rent for households	
	- bid-rent curves and land-use patterns	



*Problem Set:* Factory Bid-Rent  
*Problem Set:* Office Travel Costs  
*Problem Set:* Office Bid-Rent With No Production Substitution  
*Problem Set:* Residential Bid-Rent With No Consumption Substitution  
*Problem Set:* Using Bid-Rent Curves

16, 19 Oct SKYSCRAPER OFFICES, HIGH-RISE APARTMENTS AND TOWNHOUSES pp 141-142, 16-160  
 Substitution in the construction of offices  
 Substitution in the consumption of housing

*Problem Set:* Office Bid-Rent: Skyscraper Offices  
*Problem Set:* Residential Bid-Rent: High Rise Apts. and Townhouses

21, 23 Oct MONOCENTRIC CITY 7  
 Monocentric city (pp. 161-181,  
 “Edge Cities” 193-195, 198-201)

LAND-USE POLICY  
 Policy: land-use zoning 9  
 Open Space (pp. 230-239)  
 Urban sprawl pp. 181-189

*Problem Set:* Zoning Land as “For Agricultural Use Only.”

\*26 Oct Kahn, M., (2000), “The environmental impact of suburbanization,”  
*Journal of Policy Analysis and Management* 19, 569-586

## 5. MAKE-UP OF COMMUNITIES/NEIGHBORHOODS

28, 30 Oct SORTING 8  
 Income sorting also: pp. 195-197  
 Public good/public service sorting  
 Socio-economic sorting

*Problem Set :* Income Sorting  
*Problem Set:* Public Service Sorting  
*Problem Set :* Socio-Economic Sorting 1

### Problem Set: Socio-Economic Sorting 2

2 Nov      Review  
SECOND MIDTERM (7:00 - 9:00 pm in )

4, 6 Nov	ZONING	pp. 232-235
	Space externality	
	Fiscal zoning	

### Problem Set: Min Lot Size Zoning

## 6. HOUSING

9,11,13, 16 Nov	WHY IS HOUSING DIFFERENT Durability - deterioration and maintenance Filtering model	14
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18, 20 Nov	HOUSING POLICY	15
	Supply side	
	- public housing	
	- subsidies for private housing (Sections 236 and 8)	
	- low-income housing tax credit	
	Demand side	
	- housing vouchers	
	Community development	
	Mortgage deduction	

*Problem Set:* Evaluating a housing program.

\*30 Nov Honig, M., and R.K. Filer, (1993), "Causes of intercity variation in homelessness," *American Economic Review* 83, 248-255

## 7. MASS TRANSIT

2,4,7 Dec	Ridership sensitivity System choice Subsidies	11
*9 Dec	Bollinger, C.R., and K.R. Ihlanfeldt, (1997), “The impact of rapid rail transit on economic development: the case of Atlanta’s MARTA,” <i>Journal of Urban Economics</i> <u>42</u> , 179-204.  <i>Problem Set : Ridership Sensitivity</i>	
11 Dec	Review	
16 Dec	FINAL EXAM (4:30 - 7:00 p.m. in ECON 117)	