

Spring 2015
DUKE UNIVERSITY
Department of Economics

Economics 345/554: URBAN ECONOMICS

<http://sites.duke.edu/urbaneconomics/>

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Office Hours:	by appointment		
Class:	Tuesday 6:15– 8:45 PM	Social Sciences	111
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1. **Course description.** This course will analyze issues of spatial economics, including why cities are formed, patterns of residential and business location, models of housing market segregation, business location, and urban population "explosions" in developing countries. The course begins with an overview of the monocentric city model, explaining patterns of population density, commuting, and housing values. This course will emphasize **real estate and financial aspects of the housing market**. A second major theme of this course will be the **economy of Durham**, and the underlying residential and commercial patterns. My current research interests center on the **economics of trailer parks** and **real estate and suburbanization in transition economies**, so you'll learn more about those topics than in a conventional course.
2. **Prerequisites:** Econ 201. Introductory econometrics (Econ 208) will be extremely useful. Working knowledge of differential and integral calculus, econometrics, and Excel is necessary.
3. **Text.** There is one required text. My (voluminous) class notes will be posted on Sakai. These are intended to be supplemental, and are neither a perfect substitute for class nor the readings.

- John F. McDonald and Daniel P. McMillen. 2010. *Urban Economics & Real Estate*. Ed. 2. Malden, MA: Blackwell. (required)

I also expect you to buy and read on your own:

- Michael Lewis. 2010. *The Big Short*. New York: Norton.

Worth downloading:

- Gary Burtless and Janet Rothenberg Pack, Eds. 2002-2009. *Brookings-Wharton Papers on Urban Affairs*. Washington, DC: Brookings (BWPUA 2005). <http://muse.jhu.edu/journals/urb/>
- Bruce Katz and Robert Lang, Eds. 2003. *Redefining Urban and Suburban America: Evidence from Census 2000, Vol. 1*. Washington, DC: Brookings.
- J. Vernon Henderson, 2004 *North-Holland Handbook of Urban and Regional Economics, Vol. 4*. The papers can be downloaded from <http://www.econ.brown.edu/faculty/henderson/handbook.html>.

4. **Duke Reader Project:** This year, Econ 345/554 will be participating in the Duke Reader Project <http://dukereaderproject.org/courses/urban-economics/>. It is not mandatory, but should be useful, both from the standpoint of improved writing and improved content. Briefly, those who participate will be paired with an external alumnus/a professional who will read critically the content of papers and blog postings, which requires:
5. **Course home page and blog:** One of the best ways to learn is from each other, which can be stimulated by setting up an open home page <http://sites.duke.edu/urbaneconomics/> on which you can quasi blog by

submitting **edited** assignments. Duke Readers can respond (thereby helping larger numbers of students, as many will have similar issues); so can classmates and – gasp! – members of the community. You will be expected to post (1) a brief comment from your overview; (2) at least one of the literature survey or technical presentation, and (3) at least one of the Durham paper or term paper. The fact that some of your work will be public means that you need to think *very* carefully about the content: I don't want to scare you, but rather see this as a mechanism to help improve the caliber of your work. However, there will be an editorial process: all postings will be reviewed by the Blog Tsarina after they are submitted and prior to being posted live for the entire world to review.

6. **Honor code and course policies.** Failure to acknowledge assistance on an assignment, or to cite a source of information used in an assignment, or to represent the work of others as your own, violates the University's honor code. Any violations may result in failure of the assignment or the course, or expulsion from the University. Any exam missed for a non-legitimate reason will be accorded the grade of 0. Any exam missed for a legitimate reason will be made up with an oral exam as soon as EcoTeach can schedule it.

Late work will be penalized by 1/3 grade point per day late (excluding Sundays).

Assignments must be submitted via Sakai. An electronic and a hard copy of the term paper must be submitted to the instructor.

Standard formatting for regular text material shall be as follows: 1-inch margins top/bottom/left/right; 1.5 line spacing; extra space between paragraphs; Garamond 12 font; right hand justification for main text. References and footnotes should be single space (with space between individual citations) and Garamond 11 font. Assignments and term papers that have not gone through a basic spell and grammar check will not be accepted. **Revisions of papers receiving failing (F) or low (C or D) grades will not be accepted, regardless of whether the reason for the grade concerns content, writing quality, or failure to proofread.** Files attached with viruses will be deleted and not regarded as submitted; if for some reason the virus gets through and infects one of my computers, you will receive a grade of 0 for the assignment.

7. **Grading and assignments.** The grades will be determined as weighted averages of exam and homework performances:

Durham overview	6%	January 19
Literature survey and technical presentation (7% each)	14%	February 2
		February 23
Durham paper	22%	March 23
Research project/term paper	33%	April 20
Final examination ¹	10%	April 30 (7-10 PM)
Home page comments and class participation and presentations	15%	

If you participate in the Reader Project, then a written report of your correspondence with your Reader, and a draft of the project you are working on, will be accepted in lieu of the lit survey and technical presentation.

The **essays/presentations** include (1) an untrained overview of Durham, (2) a brief literature survey on a policy topic of interest, with dissemination via Blackboard to the entire class and the course site, (3) a technical presentation (disseminated as above): short but detailed presentation of a formal (*i.e.*, mathematical or statistical) spatial economic model, or pertinent statistical technique, and (4) an analysis of an urban policy issue relevant to Durham. Topics must receive the instructor's approval.

¹ I reserve the right to cancel the final, or to give those with GPAs above an as yet unspecified level the right not to take the final, in which case the final presentation will count for 10% of the total grade.

The **term paper** is expected to be 15-20 pages in length plus tables, on a topic of the student's choice, but subject to instructor approval. The paper is expected to involve [a] original empirical or theoretical research (required of students in Econ 554), or [b] a comprehensive survey a topic, and provide policy analysis in light of recent data and research. However, I will push strongly for all students to undertake original empirical work, regardless of whether or not it makes use of sophisticated statistical techniques.

The **final examination** will be comprehensive, but will have a Durham focus.

6. **Focus: Durham – initial assignment and final exam.** One of the purposes of this course is to give you a much deeper understanding of the community in which you are at least temporarily living; I also want to remove the abstractness of the course topic. To tie it in, your first and last assignments (the last being the final exam) will focus on Durham.

Your first assignment is simple, but time consuming: I want you to visit 11 sites in Durham and observe. For each one, write up notes (a paragraph on each except for one, which should be a bit more in depth – say 2-3 paragraphs) on what strikes you about the street, neighborhood or commercial area (one block in all directions of the point identified). When you observe, do so as an economist – think about how well lawns are maintained, the value of vehicles relative to structures, the density of the area, the degree of homogeneity ... and what these might imply. I encourage you to add or attach photographs. I also expect you to traverse the entire area.

This assignment should only be a total of 3-6 pages, but it will be time consuming, because you have to travel all over Durham. How you do it is part of the assignment. If you don't have a car or bicycle, you can rent a bike over at Durham Cycles on 9th Street. You should choose 11 of the 33 sites listed below, but be aware that credit will be given for diversity of selection.

The locations are:

1. S. Alston Ave, from Riddle to Lawson + E. Lawson from Roxboro to Briggs
2. E. Pettigrew, from Roxboro to Ellis
3. Junction Rd., from Holloway to Geer
4. The neighborhood bordered by Roxboro, Geer, Elizabeth, and Holloway
5. Maple from E Main to Liberty; then Spruce from Liberty to Juniper
6. Woodcroft Parkway, from Hope Valley to Carpenter Fletcher
7. E. Forest Hills Blvd.
8. Guess Rd. from Sedgfield to Duke Homestead Rd. to Carver
9. Old State Highway 10 from route 70/Hillsborough Rd to Murphy School Road; then Murphy School to Cornwallis then Cornwallis to Kerley
10. Geer St., from Morris to Cheek
11. Cole Mill Rd. and Stoneybrook
12. Northgate Mall
13. Fayetteville and NC 54 (three blocks in all directions)
14. Hayti area (you define your route)
15. Roxboro, from Pettigrew to Old Oxford Rd.
16. Stoneybrook Drive, from Cole Mill Rd. to Carver
17. Old NC 10/Old Hillsboro Rd. from route 70 to Mount Hermon Church Rd.
18. Cheek Rd., from Geer to Falls Lake
19. Club Blvd., from Hillandale to E. Geer
20. Bivins St (entirety)
21. E. Main, from Roxboro to Guthrie
22. Cleveland-Holloway neighborhood (you define your route)

23. NC Central University and surrounding area
24. Weaver St., from Cornwallis to Theresa
25. American Tobacco Trail (not campus: you need to go up and down the trail)
26. Bahama Rd.
27. S. Miami, from East End to Cornwallis
28. Rte. 751 from I-40 to Fayetteville
29. Parkwood neighborhood
30. Old North Durham neighborhood
31. Rolling Hills/Southside neighborhood
32. Curtis, Elmira, Medina, and Canal Street neighborhood
33. Pickett Rd., from Perry to Erwin

Notes:

- You should be able to do this in half a day.
- I recommend going in daylight.
- I recommend going with one other person and discussing what you see.
- If driving, do not park in a bad neighborhood and take notes. This makes you look like an inexperienced undercover police officer.
- International students *must* pair with an American student.
- I can tell if you do this via Google maps.
- Photos are useful: I don't want dozens from each site, but one or two used to illustrate key points would be fine.
- Be prepared to discuss (and post best pictures).

The final exam also will focus on some of the communities listed above. But, this time I will prepare some specific questions in advance, and allow you to come to the final with a notebook on these locations. The exam will ask you to apply specific theoretical models to explain the patterns you observe, and also will have you compare these patterns to empirical findings from other cities.

7. **Focus: Durham – paper.** This is a short paper of 7 to 8 pages (plus tables and references) in which you are to address a spatial feature or policy issue related to Durham, subject to my approval. Ideally, the paper will involve data analysis and address an issue of policy interest; it will also include a discussion of past patterns or policy decisions. Recent topics range from analyses of the determinants of commercial property prices/rental rates to determinants of housing values in Durham and Orange Counties to analysis of trends in racial segregation to analysis of patterns of new housing starts and residential density to an analysis of the impact of the Durham jail's site for downtown expansion.
8. **Visiting speakers and class conduct.** In addition to learning about Durham and the Triangle region, we will have many visiting speakers. On days with visitors, you will be responsible for getting material not covered in class from my on-line lecture notes. **In general, I will plan to lecture on formal models or when rapidly surveying a literature. At other times, my plan is to “reverse” the class by:**
 - **Dividing you into teams of 2-3**
 - **Calling on a couple of teams randomly each class to present sections and discuss related readings as relevant parts of the text.**
 - **Your participation grade will depend on your performance.**
9. **Course outline:** As we come to each topic, I will give an updated a list of required and optional readings. The McDonald and McMillen text is the core, and you should read it. You are also responsible for everything covered in my notes. If that material is technical, I will cover it in class, and not expect you to cover much else. If it is not terribly technical from the standpoint of theoretical difficulty, I will expect you to read one or

more of the optional readings, and be prepared to discuss it in class. **I will be calling on teams at random, so preparation will be essential.**

I will expect your papers, blog contributions, and classroom remarks to reflect the readings (including *The Big Short*).

Tuesday January 13	Introductory Lecture: Why do cities exist?
Monday January 19	Assignment 1 (Durham overview) due²
Tuesday January 20	Stylized facts and patterns II: central place theory
Tuesday January 27	
Land rent and urban structure	
	Land use in the monocentric and modern cities
Monday February 2	Assignment 2 (literature survey) due
Tuesday February 3	Agglomeration and other economies
	Land use controls, zoning, and the Tiebout model
Tuesday February 10	Household sorting, search costs, and segregation
	More models
Tuesday February 17	Real Estate Law, Institutions, and Markets (demand and supply)
	Mobile homes
Monday February 23	Assignment 3 (technical article presentation) due
	Durham paper topic and outline due
Tuesday February 24	
Real estate asset valuation, development, and investment	
Tuesday March 3	Sub-prime mortgages and other financial issues
Tuesday March 10	spring break
Tuesday March 17	Sub-prime mortgage crisis II: macro effects and consequences³
Monday March 23	Assignment 4 (Durham research paper or policy analysis) due
Tuesday March 24	Housing booms and busts
	Local governments, property rights, and local economic development
Tuesday March 31	International real estate topics
	Property rights in developing countries and other local government issues
	Term paper topic, outline, and dataset due
Tuesday April 7	
	Autos, highways, and congestion
Tuesday April 14	Mass Transit
	Business location and the core model of spatial economics
	City and business location II: economic development strategies
Monday April 20	Assignment 5 (term paper final version) due
Tuesday April 21	Urban growth in BRICS and developing countries
	Labor markets and migration in developing countries
Thursday April 30	Final Exam 7:00 – 10:00 PM

² All assignments are due at 11:59 pm.

³ This class probably will need to be rescheduled to a later date because of an unavoidable conflict.