Topics in Urban and Spatial Economics

AED Econ 7415: Advanced Regional Economics 2 (Part 1)
Department of Agricultural, Environmental, and Development Economics
Ohio State University
Spring Quarter 2018

INSTRUCTOR: Elena Irwin, Professor
Office: Room 316, Ag. Admin Building; Email: irwin.78@osu.edu
Office Hours: I do not have formal office hours. A good time to talk is after class. I am also happy to set up a meeting by appointment. Email is the best way to reach me.

Time and location: 11:10 – 12:30 Monday and Wednesday, AA246

Course website: Canvas

Course description: This course builds on AED Econ 7410 Regional Economics I and is designed to further introduce you to topics in urban and spatial economics. Part 1 of this course is taught by Prof. Elena Irwin and part 2 is co-taught by Prof. Alessandra Faggian and Prof. Jean Michel Guldmann. In part 1 of this course, we will focus on the spatial dimensions of urban areas, including the key determinants of intra-urban spatial structure, such as transportation costs, amenities and spatial interactions. In addition, we will consider aspects of housing markets and factors influencing housing demand and supply, urban growth, land development, urban decline and renewal, and price dynamics. Our primary focus will be on applied economic papers on key topics, many of which have a spatial dimension—e.g., they use spatial data, ask interesting questions about space, or seek to account for space in some way. My hope is to expose you to a range of research so that you may further develop your own ideas.

Assignments: A brief description of course assignments is given below. A more detailed description for the first three assignments will be handed out in class.

1. Research proposal: You will identify a research question of your choosing that is on an urban or spatial economics topic (one of the topics from this course, or a related topic). You will write a 5-page research proposal that addresses the following points: (i) background and significance, (ii) objectives, (iii) data and methods, (iv) expected contribution, (v) estimated budget and timeline. The proposal will be evaluated as if it were a grant proposal to an external government agency (e.g., National Science Foundation, US Department of Agriculture) and is intended to give you some exposure to formulating your research ideas in this fashion.

2. Econometrics homework: You will work with housing market data to estimate a series of models, test one or more hypotheses and provide a written synthesis of your results and a discussion in terms of the research question.

3. In-class journal article presentation: You will be required to present an article in class. You may choose a paper from the syllabus (not an overview paper and not a required paper) or you can seek my approval for a different paper that is on a related topic. We will try to match up the paper topic and the course topic of the week as best possible.

4. Readings and class discussions: Lectures and class discussion are equally important aspects of the class. I expect active discussion of required papers in class – these papers are noted with a (*) on the syllabus. This requires you to read assigned papers before the class period they are discussed! The schedule for discussing these papers is given with the reading list below. All readings are posted under "Files" on Canvas.
A note on class participation... This is a small class and I will seek to foster discussion. I understand that some people are more comfortable than others speaking in class, but critical thinking and public speaking are important academic skills. I will do my best to foster discussion and include everyone. Towards that end, don’t be surprised if I ask you to hold your thought, if you have already been active in discussion, and give someone else a chance who hasn’t yet contributed.

Deadlines: All assignments are due at the beginning of the class unless otherwise noted. Late assignments will be accepted only within a week of the due date and will receive an automatic 10% deduction.

- Mar 15: Identify research proposal topic and question
- Mar 21: Econometrics homework due
- Apr 8: First draft of research proposal due (not graded)
- Apr 22: Final draft of research proposal due

Grading: The course grade is a function of your performance in both Part 1 and 2 of 7415. Your grade is based on the following:

- Research proposal .............................................................. 35%
- Econometrics homework ..................................................... 25%
- In-class participation (presentation & class discussions) ......... 15%
- Assignment by Prof Guldmann ............................................. 25%

Disabilities: Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs.

Academic Misconduct: Academic misconduct of any kind is not acceptable. If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University’s Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.
READING LIST
AED Econ 7415: Advanced Regional Economics 2 (Part 1)

The following is a tentative course schedule and reading list that is subject to change. Papers listed marked with a (*) are required reading and you should come prepared to discuss these in class. The unmarked papers are background readings or optional papers that I may draw on in class and encourage you to read.

JAN 9, 11: Overview of course and fundamental features of spatial problems in economics
What is special about space? Urban spatial structure, spatial pattern versus spatial process, empirical challenges, first nature and second nature advantages, durability, spatial impossibility theorem, spatial equilibrium.

Theory and background


Empirical

JAN 16: Martin Luther King Holiday -- No class

JAN 18, 23, 25, 30: Prof Ale Faggian lecturing

FEB 1 and 6: Spatial equilibrium, travel costs and the urban bid rent model
Fundamental role of transportation costs in household demand for location and housing, closed and open city models, city size, urban density. Empirical evidence of transportation costs on household location and urban growth.

Theory and background


**Empirical**


**FEB 8 and 13: Income, amenities and household location**

What are the predictions of the urban bid rent model with multiple income groups? Role of spatial amenities, transportation costs, city versus suburban locational choice. Role of amenities and disamenities in household locational choice.

**Theory and background**


**Empirical**


**FEB 15 and 20: Land development, regulation and housing supply**

Determinants of land rents and urbanization in a growing city, optimal timing of land development, role of uncertainty. Effect of land use regulations on timing of land development and housing supply, role of geography in determining housing supply elasticities.

**Theory and background**


**Empirical**


**FEB 22 and 27: Durable housing, urban decline and redevelopment**

Differences in rate of urban growth versus urban decline, implications of durable housing for growth and decline. Long-run cycles of urban decline and renewal, the role of aging housing stock, redevelopment and social externalities.

**Theory and background**

* Brueckner, J., Lectures on Urban Economics, Ch. 3, Section 3.5.


**Empirical**


**MAR 1 and 6: Suburbanization and sprawl**

Causes of urban decentralization, suburbanization, urban sprawl. Central city redevelopment versus new suburban land development. Effect of transportation on suburbanization and urban growth.

**Theory and background**


**Empirical**


**MAR 8: Catch up day**

**MAR 13 and 15: OSU Spring Break**

**MAR 20 and 22: Housing market dynamics**

**Theory and background**


**Empirical**


**MAR 27 Wrap-up**