Course overview and requirements

This course will introduce students to some of the core models and ideas in Urban Economics. It will also discuss applications of these models in related fields such as Environmental Economics, Development Economics, Labor Economics and Economics of Race and Discrimination. An important goal of the course will be to expose students to innovative empirical research in Urban Economics and related fields and to discuss and understand the empirical challenges and methods used.

Grade

30% Problem Set/Referee Reports
50% Original Paper or Paper Replication
20% Presentation

Students will receive a grade of A, A-, B+ or B based on their grades on these components (+ group incentive).

Referee Report Structure (3 pages)

1. First paragraph should explain the paper’s core research question and why is it interesting. What is the conventional wisdom about the question? Why is the answer not obvious?
2. Explain the data set structure and the methodology of the paper. How is this data being used to answer the question? What are main challenges in answering the question and how is this paper overcoming those challenges?
3. Write a critique of the paper and suggestions for improving the paper.

Original Paper or Paper Replication with New Analysis (15-20 pages, double spaced)
Coauthorships are allowed and encouraged. The standard for grading will be adjusted accordingly.

1. Original Empirical Paper
   a. The paper should follow the structure of the papers we read for the class, both in terms of the structure of the introduction and the structure of the paper sections.
   b. In the first couple of paragraphs, the introduction should state the original research question and substantiate why is it interesting.
   c. The paper should include the following sections: Introduction, Model, Empirical Framework, Data, Results, Conclusion, References, Figures, Tables.
d. The Empirical Framework section should include the equation or econometric model you are estimating and a careful description of the notation. It should also state the identification assumption.

2. Paper Replication
   b. The paper should include the following sections: Introduction, Literature Review, Empirical Framework, Data, Replication of Results and Discussion, Analysis Extension, Conclusion, References, Figures, Tables.
   c. The introduction should be similar to a referee report of the paper, where you state the main question of interest, why it is important, the methodology they use and how does it answer the question of interest. Then you should provide a criticism or an extension of the paper that can be answered with additional analysis.
   d. The literature review should briefly summarize the papers that are most closely related to the paper and that extends it beyond the papers cited by the original paper to include more recent or non-cited relevant papers.
   e. Replicate the main tables of the analysis (the tables that provide the answer to the main research question) and explain any discrepancies between your results and the paper results (if any). Also explain any nuances in the data analysis you understood in the replication process. For example, the sample restriction could play an important role in the results, there are a lot of zeros in the dependent variable and that means most of the variation comes from a few observations, etc.
   f. Perform additional analysis that has one of the following goals (a) to substantiate a criticism (e.g. if the sample restriction is eased, the results change substantially); (b) to address a criticism (e.g. gather additional data on a proposed confounder and show that the results do not change when adding it to the controls); (c) to extend the paper (e.g. propose a closely related question and use the paper’s data or additional data to answer it). Make sure you clearly state your empirical framework for the additional analysis, which may include an equation and detailed notation description.

Note: In the AER, AEJ:Applied, and JPE you can find a link to the data when accessing the article directly through the journal and clicking on supplemental material. For the QJE there is a separate data repository at https://dataverse.harvard.edu/dataverse/qje.

Group Collaboration
Students will be assigned into groups to

(a) Work on exercises together during the class
(b) Discuss paper ideas
(c) Reading each other drafts of final paper and giving comments
(d) Rehearsing presentations
Contents

Week 1 (1 Lecture)
8/24

Introduction and the Definition of a City from an Economic Perspective

*Brueckner, J. 2011 Ch. 1. Lectures on Urban Economics, MIT Press


Week 2-3 (2 Lectures)
8/31, 9/7

Core Spatial Equilibrium Models

Problem Set 1 (Due on 9/14)


**Week 4-5 (1 Lecture)**
*9/14-9/21*

**Spatial Equilibrium Applications**

**Referee Report 1 (Due on 9/15)**
Fraenkel, Rebecca and Sam Krumholz. 2019. “Property Taxation as Compensation for Local Externalities: Evidence from Large Plants”


**Week 6 - 7 (2 Lectures)**
*9/28 and 10/5*

**Agglomeration externalities I**

**Referee Report 2 (Due on 10/12)**

Combes, Pierre-Philippe and Laurent Gobillon. 2005 Ch.5: The Empirics of Agglomeration Economies, Handbook of Regional and Urban Economics, Vol 5A


Arkolakis, Advancements in Gravity Models of Spatial Economics 2015 (slides from Frontiers of Urban Economics Conference)

**Week 8 (1 Lecture) 10/12**

**Agglomeration externalities II**


Miyauchi, Yuhei, Kentaro Nakajima and Stephen J. Redding, “The Economics of Spatial Mobility: Theory and Evidence Using Smartphone Data”, NBER WP 28497

Card, David, Jesse Rothstein and Moises Yi, “Location, Location, Location”, 2022 WP

**Week 8 (1 Lecture) 10/19**

**Housing Supply and Housing Regulation**

Visiting Lecturer: Andrii Parkhomenko (USC)


Parkhomenko, Andrii, "Local Causes and Aggregate Implications of Land Use Regulation". 2017, *mimeo*


**Week 10 (1 Lecture)**

10/26

**Transportation**

**Referee Report 3 (Due on 11/2)**


Barwick, Panle Jia, Shanjun Li, Andrew Waxman, Jing Wu and Tianli Xia, “Efficiency and Equity Impacts of Urban Transportation Policies with Equilibrium Sorting”, *Mimeo* 2021


**Week 11 (1 Lecture)**

11/2
Cities in the developing world and rural to urban migration
Visiting Lecturer: Vernon Henderson, LSE


Henderson, J. Vernon and Matthew A. Turner, 2020, “Urbanization in the developing world: too early or too slow?”, Journal of Economic Perspectives, 34 (3)


Harari, Mariaflavia and Maisy Wong, “Slum upgrading and long-run urban development:

Week 12 (1 Lecture)
11/9
Student Presentations

Week 13 (1 Lectures)
11/16
Student Presentations

Week 14 (1 Lecture)
11/30

Inequality, race and discrimination, and environmental justice


