University of International Business and Economics
International Summer School

ECON 366 Urban Economics

Term: July 18th–August 12th, 2022
Instructor: TBD
Home Institution: TBD
Email: TBD
Class Hours: Monday through Friday, 120 minutes each day (2,400 minutes in total)
Discussion Session: 2 hours each week
Office Hours: TBD

Total Contact Hours: 64 contact hours (45 minutes each, 48 hours in total)
Credit: 4 units

Course Description:

Economic analysis of the forces determining an urban area's income, employment, land use, industrial structure, and public sector. Applications to issues such as housing, central city-suburban relationships, transportation, and neighborhood economic development. Students will be trained to estimate the relationship between urban density/city size and a set of economic indicators e.g., GDP per capita and labor productivity, and crime rate.

Course Goals:

Upon successful completion of this course, students will be able to:
1. Use microeconomic theory to explain the location and structure of cities.
2. Assess the impact of city ordinances (such as zoning or growth controls) on urban economic development.
3. Explain the economic underpinnings of selected urban issues (such as poverty, transportation, education, employment and crime).
4. Estimate the relationship between urban density/city size with a set of economic indicators.

Required Textbook:

1. Urban Economics 8th Edition Arthur O'Sullivan ISBN 978-0-07-351147-4

2. Principles of Econometrics, 5th Edition R. Carter Hill, William E. Griffiths, Guay C. Lim
ISBN: 978-1-119-32094-4

Reading List:

A Zheng, S., Kahn, M. E., & Liu, H. (2010). Towards a system of open cities in China: Home prices, FDI flows and air quality in 35 major cities. Regional Science and Urban Economics, 40(1), 1-10. doi:http://dx.doi.org/10.1016/j.regsciurbeco.2009.10.003

B Zheng, S., Kahn, M. E., Sun, W., & Luo, D. (2014). Incentives for China's urban mayors to mitigate pollution externalities: The role of the central government and public environmentalism. Regional Science and Urban Economics, 47, 61-71. doi:https://doi.org/10.1016/j.regsciurbeco.2013.09.003

C Zheng, S., Sun, W., Wu, J., & Kahn, M. E. (2017). The birth of edge cities in China: Measuring the effects of industrial parks policy. Journal of Urban Economics, 100, 80-103. doi:http://dx.doi.org/10.1016/j.jue.2017.05.002

D Zheng, S., Zhang, X., Sun, W., & Lin, C. (2019). Air pollution and elite college graduates' job location choice: evidence from China. The Annals of Regional Science, 63(2), 295-316. doi:10.1007/s00168-019-00939-6

E Zheng, S., Zhang, X., Sun, W., & Wang, J. (2019). The effect of a new subway line on local air quality: A case study in Changsha. Transportation Research Part D: Transport and Environment, 68, 26-38. doi:https://doi.org/10.1016/j.trd.2017.10.004

Exams:

The final exam is not carried out to assess learning outcomes of this unit. Instead, students are expected to conduct research using real world dataset and write a formal report with at least 3000 words in length. This exercise is group oriented. Students are encouraged to form several groups, each of with 4-6 individuals. The final marks are based on the quality of both group report and class presentation. The following topics are encouraged but not limited to them. Other topics from students are upon approval from instructor:

1.   A curse or blessing? The role of urban density in Hong Kong.
2.   Housing market in Hong Kong: the role of land supply.
3.   The driving forces of housing price in first-tier cities in Mainland China.
4.   College graduates and housing price in the first-tier cities in Mainland China.
5.   Capitalizing the environmental quality in Chinese cities: Estimating the willingness-to-pay.

Personal Strategic Plan:

1.   Explain the economic theory using real world context.
2.   Avoid too much mathematical derivations.
3.   Focus on real world implications and applications.
4.   Apply the theory into practice with dataset.
5.   Formal research training.

Grading Policy:

Attendance	20%
Participation	10%
Group report	40%
Group presentation	30%

Grading Scale:

Assignments and examinations will be graded according to the following grade scale:

A	90-100	C+	72-74
A-	85-89	C	68-71
B+	82-84	C-	64-67
B	78-81	D	60-63
B-	75-77	F	below 60

Class Schedule:

Date	Lecture	Readings
Day 1	Introduction and Axioms of Urban Economics • What Is urban economics and why do cities exist? • The Five Axioms of Urban Economics	Chapter 1 of O'Sullivan
Day 2	Why Do Cities Exist? • A Region without Cities—Backyard Production Comparative Advantage and Trade Scale Economies in Exchange • A Factory City Determining Wages and Prices The Market Area of a Factory City • The Industrial Revolution and Factory Cities • A System of Factory Cities • Innovation Cities	Chapter 2 of O'Sullivan & Reading List A
Day 3	Why Do Firms Cluster? • Sharing Intermediate Inputs • Self-Reinforcing Effects Cause Industry Clusters • Sharing a Labor Pool • Labor Matching • Knowledge Spillovers • Urbanization Economies • Other Benefits of Urban Size	Chapter 3 of O'Sullivan & Reading List B

Day 4	City Size • Utility and City Size • A System of Cities • Specialized and Diverse Cities • Differences in City Size • The Size Distribution of Cities • Check the size of world first-tier cities	Chapter 4 of O'Sullivan
Day 5	Urban Economic Growth • Economic Growth: Increase in Per-Capita • Income Human Capital and Economic Growth • The Urban Labor Market • Employment Growth and Decline of the U.S. Manufacturing Belt The case of USA and the case of China • Public Policy and Equilibrium Employment • Projecting Changes in Total Employment • Who Benefits from Increased Employment?	Chapter 5 of O'Sullivan & Reading List C
Day 6	Urban Land Rent • Introduction to Land Rent • Bid-Rent Curves for the Manufacturing Sector • Bid-Rent Curves for the Information Sector • Office Bid-Rent Curves with Factor Substitution • Housing Prices • The Residential Bid-Rent Curve • Relaxing the Assumptions: Time Costs, Public Services, Taxes, Amenities	Chapter 6 of O'Sullivan & Reading List D
Day 7	Land-Use Patterns • The Spatial Distribution of Employment • The Spatial Distribution of Population • The Rise of the Monocentric City • The Demise of the Monocentric City • Urban Sprawl • Are Skyscrapers Too Tall?	Chapter 7 of O'Sullivan & Reading List E
Day 8	Neighborhood Choice • Diversity versus Segregation • Sorting for Local Public Goods • Neighborhood Externalities • Neighborhood Choice	Chapter 8 of O'Sullivan

	• Neighborhood Choices: The Roles of Education and Crime	
	• Racial Segregation	
	• The Consequences of Segregation	

Day 9	Zoning and Growth Controls • Land-Use Zoning • The Legal Environment of Zoning • A City without Zoning? • Growth Control: Urban Growth Boundaries • Other Growth-Control Policies • Housing Regulations and Housing Prices	Chapter 9 of O'Sullivan & Reading List F
Day 10	Research training: preparing for the group report & presentation. • Topic selection • Data collection • Literature review and online resources	Prepared by myself *Principles of Econometrics 5th edition* By Lim, Hill and Griffiths
Day 11	Research training: preparing for the group report & presentation. • References • Statistical tools (e.g. regression analysis) • Structure of scientific reports • Some writing tips	Prepared by myself *Principles of Econometrics 5th edition* By Lim, Hill and Griffiths
Day 12	Research training: preparing for the group report & presentation. • Regression analysis • Cross-sectional or panel data estimation • Estimation using STATA • Explaining the regression output	Prepared by myself *Principles of Econometrics 5th edition* By Lim, Hill and Griffiths
Day 13	Autos and Highways • Congestion Externalities • The Congestion Tax • Practicalities of the Congestion Tax • Alternatives to a Congestion Tax • The Road Capacity Decision • Autos and Air Pollution • Motor Vehicle Accidents • Automobiles and Poverty	Chapter 10 of O'Sullivan

Day 14	Urban Transit • Commuting and Transit Ridership • The Cost of Travel and Modal Choice • The Efficient Volume of Ridership • Designing a Transit System • Deregulation: Contracting and Paratransit • Transit and Land-use Patterns	Chapter 11 of O'Sullivan

Day 15	Education • Spending and Educational Achievement • School Inputs: The Importance of Teachers • Innovation: Charter Schools • Spending Inequalities and Public Policy • Education in Central Cities The Context of Shanghai	Chapter 12 of O'Sullivan
Day 16	Crime • Crime Facts • The Rational Criminal • The Equilibrium Quantity of Crime • Legal Opportunities and Education • Applications: Big-City Crime and the Crime Drop • How Much Crime? • The Role of Prisons	Chapter 13 of O'Sullivan
Day 17	Why Is Housing Different? • Heterogeneity and Hedonics • Durability, Deterioration, and Maintenance • Moving Costs and Consumer Disequilibrium • The Filtering Model of the Housing Market • Housing Policy The Migrant Workers in China and Housing price	Chapter 14 of O'Sullivan
Day 18	Group Presentation 1 Q&A	
Day 19	Group Presentation 2 Q&A	
Day 20	Group Presentation 3 Q&A	