

# Spatial Economics

Matthias Wrede

[matthias.wrede@fau.de](mailto:matthias.wrede@fau.de)

Chair of Economics and Social Policy



# Syllabus

- Prerequisites: Microeconomics, Econometrics I
- Language: English
- Availability: annually (summer semester)
- Credits can be earned for MSc Economics (Public Economics & Labor Economics)
- Workload 150 h (including 60 contact hours)  $\equiv$  5 ECTS
- Lecture (2 h per week) + tutorial (2 h per week)
- 60-minutes written examination (80%) + presentation (20%)
- Exam covers lecture + tutorial
- Voluntary presentation on a research paper to improve the grade by up to 0.7
- Slides, papers, exercises, data etc. on StudON (password protected)
- Lecture: Wednesday, 09:45-11:15, LG 5.154
- Tutorial: instructor Luisa Schneider (luisa.schneider@fau.de),  
Wednesday, 16:45-18:15; starts May 11 (ZOOM) & May 25, LG 0.421 / LG 0.143

# Aim

- At the end of this course,
  - Students are able to describe and to internationally compare the regional patterns of major economic activities in terms of stylized facts.
  - Students are able to present, interpret, and discuss selected theories in regional and urban economics.
  - Students are able to assess empirical tests of selected hypotheses derived from theories in regional and urban economics to evaluate and critically examine their informative value.
  - Students are able to discuss and critically examine economic policy implications of selected theories in regional and urban economics.
  - Students are able to assess, evaluate and discuss selected recent research papers.

# Contents

- Part I: Foundations
- Part II: Fundamentals of theoretical spatial economics
- Part III: Fundamentals of empirical spatial economics
- Part IV: Compensating differentials
- Part V: New Economic Geography - the core-periphery model
- Part VI: Selected studies

## Textbooks

- Brakman, S., Garretsen, H. & van Marrewijk, C. (2019). *An Introduction to Geographical and Urban Economics: A Spiky World*. Third Edition. Cambridge, UK: Cambridge University Press.
- Brueckner, J.K. (2011). *Lectures on Urban Economics*. Cambridge: MIT Press.
- Combes, P.-P., Mayer, T. & Thisse, J.-F. (2008). *Economic Geography*. Princeton and Oxford: Princeton University Press.
- Elhorst, J.P. (2014b). *Spatial Econometrics*. Berlin, Heidelberg: Springer-Verlag.
- Fujita, M. & Thisse, J.-F. (2002). *Economics of Agglomeration. Cities, Industrial Location, and Regional Growth*. Cambridge, UK: Cambridge University Press.

## Selected surveys

- Baum-Snow, N. & Ferreira, F. (2015). Causal Inference in Urban and Regional Economics. In: Duranton, G. Henderson, J.V. & Strange, W.C. (Ed.) *Handbook of Regional & Urban Economics*. Vol. 5A. 3-68.
- Elhorst, J.P. (2014a). Spatial Panel Methods. In: Fischer, M.M. & Nijkamp P. (Ed.) *Handbook of Regional Science*. Berlin, Heidelberg: Springer-Verlag. 1637-1652
- Moretti, E. (2011). Local Labor Markets. In: D. Card & O. Ashenfelter (Ed.). *Handbook of Labor Economics*. Vol. 4b. 1237-1313.
- Neumark, D. & Simpson, H. (2015). Place-Based Policies. In: Duranton, G. Henderson, J.V. & Strange, W.C. (Ed.) *Handbook of Regional & Urban Economics*. Vol. 5B. 1198-1287.
- Redding, St.J. & Rossi-Hansberg, E. (2017). Quantitative Spatial Economics. *Annual Reviews of Economics* 9. 21-58.

## Academic field journals

- Spatial economics:
  - Journal of Urban Economics
  - Journal of Economic Geography
  - Regional Science and Urban Economics
  - Journal of Regional Science
  - Land Economics
  - Urban Studies
  - Annals of Regional Science
  - Papers in Regional Science
- Related fields:
  - Journal of Public Economics
  - Transportation Research Part B: Methodological

## Mandatory presentations

- Several empirical tasks
- Each task will be assigned to a group of three to five students on May 25th.
- Ideally, teams should be formed beforehand.
- Each groups will be given a data set and is asked to apply a certain concept (fixed & random effects models, spatial regression models, different functional forms of distance variables)
- The group solves the task together and prepares a 20-minutes presentation.
- In the presentations, groups should describe and discuss tasks, methods, results, and implications.
- Presentations at July 6
- Participation compulsory
- More information: Luisa Schneider ([luisa.schneider@fau.de](mailto:luisa.schneider@fau.de))



# Voluntary presentations

- Statement on preferences via StudOn (until May 19)
- Per paper one group with a maximum of three members
- A maximum of 15 minutes to present
- Content:
  - Research question
  - Relevance, theory/hypotheses, institutions
  - Data
  - Empirical strategy, identification
  - Main results
  - Comments
- Presentations at June 29

## Papers intended for voluntary presentations

- Aliprantis, D. & G.-C. Richter, F. (2020). Evidence of Neighborhood Effects from Moving to Opportunity: Lates of Neighborhood Quality. *Review of Economics and Statistics* 102 (4). 633–647.
- Eizenberg, A., Lach, S. & Oren-Yiftach, M. (2021). Retail Prices in a City. *American Economic Journal: Economic Policy* 13 (2). 175-206.
- Heblich, S., Redding, S. & Sturm D. (2020). The Making of the Modern Metropolis: Evidence from London. *Quarterly Journal of Economics* 135 (4). 2059–2133.
- Lee, S. & Lin, J. (2017). Natural Amenities, Neighbourhood Dynamics, and the Persistence in the Spatial Distribution of Income. *Review of Economic Studies* 85. 663-694.
- Monte, F., Redding, St.J. & Rossi-Hansberg E. (2018). Commuting, Migration, and Local Employment Elasticities. *American Economic Review* 108 (12). 3855-3890.

