

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI, HYDERABAD CAMPUS

Second Semester: 2021-2022

Course Handout (Part-II)

Date: 15.01.2022

In addition to Part-I (General Handout for all courses appended to the timetable) this portion gives further specific details regarding the course

Course No. : ECON F416

Course Title : Regional Economics

Instructor-in-Charge: Prof. Vivekananda Mukherjee

1. Course Description

The human habitation and productive activities are highly concentrated over the earth. The most of the lands are either sparsely populated or lies unused. The unequal prosperity of some states/regions in a country vis-à-vis the other states/regions, that of the cities' vis-a-vis the villages', are examples of this phenomenon. Why does the spatial concentration occur and sustain? While physical geography can explain a part of the above observation, economic forces play a major role in explaining the spatial concentration. The course introduces the students to these economic forces. It discusses both the theories and the statistical methods that test the theories with data. The public policy implications are also discussed. Pre-requisites include understanding of the basic microeconomics and the regression method.

2. Course Goals

- Students will learn how the locations are chosen for production and habitation
- Students will learn how to study convergence/divergence across regions
- Students will learn about the rural-urban/urban-urban migration
- Students will learn how a cityscape develops
- Students will learn about the road-congestion problem, its impact and solution
- Students will learn about the construction of quality-of-life index of different cities

3. Text Books

T1: Jan K. Brueckner (2011): *Lectures on Urban Economics*, Cambridge, MA: MIT Press (Low price Indian edition (PHE) is available) Chapter 1,2,3,5,11

4. Reference Books/Papers

R1: Roberta Capello (2016): *Regional Economics*, 2nd Edition, London: Routledge (Available at the Library), Chapter 1,2

R2: Stef Proost and J-F Thisse (2019): What can be Learned from Spatial Economics?, *Journal of Economic Literature* 57(3), 575 – 643.

R3: Jan Tirole (1988): *Theory of Industrial Organization*, MA: MIT Press, Chapter 7.

R4: Oz Shy (1995): *Industrial Organization: Theory and Applications*, MA: MIT Press, Chapter 7.

5. Additional Readings

A1: Paul Krugman (1997): *Development, Geography and Economic Theory*, Cambridge, MA: MIT Press.

Papers from Journals.

6. Course Plan

| Lecture No. | Learning Objective(s) | Topics to be covered | Chapter in the Textbook |
|-------------|---|---|--|
| I | Introduction | | |
| 1 - 2 | Questions asked in the study of Regional Economics | Introduction to Regional Economics and Overview of the course | T1, Chapter 1 R1, Chapter 1 R2 |
| 3 - 4 | Measurement of convergence/divergence of regions | Regional Convergence/Divergence | Papers |
| II | Basic Forces that Explain Regional Concentration | | |
| 5 – 10 | Forces of agglomeration and dispersion | Economies of Scale and Transport Cost | T1, Chapter 1 R1, Chapter 1 R2, Papers |
| 11 – 14 | Location decision of Firms and Households | The Early Spatial Models | T1, Chapter 1 R1, Chapter 1 R2, R3, R4 |
| 15 – 19 | Interaction between economies of scale and transport cost | Krugman's Model of Economic Geography | T1, Chapter 1 A1, R2, Papers |
| III | Analysis of Urban Spatial Structure | | |
| 20 – 25 | Behavior housing prices, rents, building heights, population density at | Closed City Models, Comparative Statics | T1, Chapter 2 R1, Chapter 2 |

| | | | |
|-----------|--|-------------------------------------|--------------------------------|
| | different parts of a city and across cities; determination of the boundary of a city | | |
| 26 | Where the rich and poor would live in a city | A City with Rich and Poor | T1, Chapter 2 R1, Chapter 2 |
| 27 – 29 | Effect of Freeway, City with Sub-centres, Segregation within the city, Effect of internet revolution: work from home | Extensions of the Basic Urban Model | T1, Chapter 3 |
| IV | Cities in Developing Countries | | |
| 30 – 32 | Why cities in developing countries are very large; why everyone does not leave rural areas to migrate to the cities; whether rural-urban migration is good | Rural-urban Migration | T1, Chapter 3 Papers |
| V | Problems of Commuting to the City | | |
| 33 – 36 | Congestion problem on highways and its solution | Freeway Congestion | T1, Chapter 5 |
| VI | Urban-urban Migration | | |
| 37 – 40 | Model of urban-urban migration, construction of quality-of-life index of cities | Urban Quality of Life Measurement | T1, Chapter 11 |

7. Evaluation Scheme

| Sr. No. | Component | Duration | Weightage (%) | Date and Time | Nature of Component |
|---------|------------------------------|-------------|---------------|----------------------------------|---------------------|
| 1 | Mid-term Test | 90 minutes | 30 | 12/03 9.00am to 10.30am | Open Book |
| 2 | Quiz/Assignment/Presentation | | 30 | To be announced during the class | Closed/Open Book |
| 3 | Comprehensive Examination | 120 minutes | 40 | 11/05 FN | Closed Book |

8. Chamber Consultation Hour

To be announced in the class

9. Notices

All materials/information pertaining to the course will be uploaded/will be available at the Library.

10. Make-up policy

Make up will be given only in genuine cases of absence. Prior permission of the Instructor-in-charge, before the examination, is necessary, if the absence is anticipated due to medical reason supported by authorized document from the Medical Centre and ARC. In exceptional circumstances the request for make-up should reach the Instructor-in- charge at the earliest.

11. Academic Honesty and Integrity Policy: Academic honesty and integrity are to be maintained by all the students throughout the semester and no type of academic dishonesty is acceptable.

Vivekananda Mukherjee
Instruction-in-Charge
ECON F416