BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI HYDERABAD CAMPUS

Second Semester: 2023-2024

Course Handout (Part-II)

Date: 09.01.2024

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. **Couse Description**
   Human habitation and productive activities are highly concentrated over the earth. Most of the lands are either sparsely populated or lie unused. The unequal prosperity of some states/regions in a country vis-à-vis the other states/regions, and 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 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 an understanding of 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 the solution
   - Students will learn about the construction of quality-of-life index for 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) Chapters 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.
R5: Debraj Ray (1998): *Development Economics*, Oxford University Press, Chapter 6.

5. Additional Readings

A1: Paul Krugman (1997): *Development, Geography and Economic Theory*, Cambridge, MA: MIT Press.
Papers from Journals:
A2: Trapezenikova (2020)
A3: Dasgupta et al. (2000)
A4: Bleakley and Lin (2012)
A5: Rosenthal and Strange (2003)
A6: Robert-Nicourd (2005)

6. Course Plan

Lecture No.	Learning Objective(s)	Topics to be covered	Reference (Book)
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 inequality and convergence/divergence of regions	Lorenz curve, Coefficient of Variation, Gini Coefficient, σ-convergence	R5, Chapter 6 A2, A3
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, A4, A5

11 – 15	Location decision of Firms	The Early Spatial Models	T1, Chapter 1 R1, Chapter 1 R2, R3, R4
16 – 24	Interaction between economies of scale, transport cost and pecuniary agglomeration	Krugman's Model of Economic Geography	T1, Chapter 1 A2, R2, A6
III	**Analysis of Urban Spatial Structure**		
25 – 29	Behavior housing prices, rents, building heights, population density at different parts of a city and across cities; determination of the boundary of a city	Closed City Models, Comparative Statics	T1, Chapter 2 R1, Chapter 2
30 - 31	Where the rich and poor would live in a city	A City with Rich and Poor	T1, Chapter 2 R1, Chapter 2
32 – 33	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**		
34 – 35	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**		
36 – 38	Congestion problem on highways and its solution	Freeway Congestion	T1, Chapter 5
VI	**Urban-urban Migration**		
38 – 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	Remark

1	Mid-term Test	90 minutes	30	11/03 - 4.00 - 5.30PM	Open/ closed Book
2	Quiz (surprise/announced) /Assignment/Presentation		30	To be announced during the class	Open Book
3	Comprehensive Examination	180 minutes	40	07/05 AN	Closed Book

8. Chamber Consultation Hour
    To be announced in the class
9. Notices
    All materials/information on the course will be uploaded/will be available at the Library.
10. Make-up policy
    In quiz/assignment/presentation no make-up will be given. In other evaluation components 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 reasons supported by an 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