RP 532 METHODS OF REGIONAL ANALYSIS AND SPATIAL ORGANISATION

Course Code: 8520532
METU Credit (Theoretical-Laboratory hours/week): 3(3-0)
ECTS Credit: 5.0
Department: City and Regional Planning
Language of Instruction: English
Level of Study: Graduate
Regional Planning
Course Coordinator: Prof. Dr. Ayda Eraydın
Offered Semester: Fall Semester

Course Objective
The course is designed to provide basic methods of analysis and planning for Regional Planning students and the ones interested in these methods. The methods introduced in the course are the ones that are widely used and important in analysis of both regions and urban areas.

Course Content
In the first part of the course mainly analytical techniques are introduced, while the second part of the course is devoted to mainly planning techniques. Each semester there are some limited changes in the course content depending on the techniques needed in Regional Planning Studio research themes.

Weekly Program

Week 1: Why to Study Regions

Part 1: Classical Models

Week 2: Von Thünen Rings, Weber’s triangle, Christaller’s hexagons

Week 3: Location theory

Part 2: Regional Analysis

Week 4: Economic Base

Week 5: Shift and Share Analysis

Week 6: Indices: index of dissimilarity-Lorenz curve/Gini coefficient, localization, specialization, diversification

Week 7: Factors and indicators of competitiveness
Week 8: Measures of concentration: gravity, spatial interaction models

Week 9: Spatial autocorrelation: Moran’s I

Part 3: Regional Analysis and Planning

Week 10: Economic Growth Models

Week 11: Convergence and Divergence

Week 12: Economic Accounting and Input-Output

Week 13: Cluster Analysis

Week 14: Export and knowledge spillovers

Grading
Students who did not participate less than 30 percent of the classes will be graded NA.

% 40 Assignments
% 30 mid-term exam
% 30 Final exam

Learning Outcomes
This course is introductory course for the students who want to specialised in analysis and planning at different spatial scales. It provides the basic knowledge and a wide spectrum of the contemporary techniques.

Reference Material
(All references are available as a hard copy)

Week 1: Why to Study Regions

Week 2: Von Thünen Rings, Weber’s triangle, Christaller’s hexagons

Week 3: Location theory

Part II Location of Factories, pp. 79-110
Factory Location as a Cost- Minimizing Exercise, pages 111-136

**Week 4: Economic Base**


**Week 5: Shift and Share Analysis**


**Week 6: Indices: index of dissimilarity- Lorenz curve/Gini coefficient, localization, specialization, diversification**


**Week 7: Factors and indicators of competitiveness**

Martin, R. A Study on the Factors of Regional Competitiveness, A draft final report for The European Commission Directorate-General Regional Policy, CAMBRIDGE ECONOMETRICS

**Week 8: Measures of concentration: gravity, spatial interaction models**


**Week 9:** Spatial autocorrelation: Moran’s I


Chapter 4: Exploratory Spatial Data Analysis pages 107-140

**Week 10:** Economic Growth Models


**Week 11:** Convergence and Divergence


**Week 12:** Economic Accounting and Input-Output


**Week 13:** Cluster Analysis


**Week 14:** Export and knowledge spillovers
