

Academic Year: 2017/2018		
Course: Regional and Urban Analysis		
Coordinator: Nuno Marques da Costa		
Teaching Staff: Nuno Marques da Costa; Miguel Padeiro		
ECTS: 6	Weekly Hours: 4h	Typology: Theoretical and Practical
Contents		
<p>1. – Introduction</p> <p>1.1 Concepts. Analysis, theory and experience.</p> <p>1.2 Description. Data analysis. Models. Models typology.</p> <p>1.3 Urban and regional systems</p> <p>1.3.1 Systems. General definition</p> <p>1.3.2 Spatial systems: regions and city</p> <p>1.3.3 Urban and regional systems: operation and management.</p> <p>1.4 Urban and Regional Planning</p> <p>2. – Models in general.</p> <p>2.1 Framework, objectives and methods.</p> <p>2.2 Location classic models.</p> <p>2.3 Demographic models.</p> <p>2.4 Interaction models.</p> <p>2.4.1 General theory.</p> <p>2.4.2 Gravity models.</p> <p>2.4.3 Potential notion.</p> <p>3. – Regional systems analysis.</p> <p>3.1 Key elements.</p> <p>3.2 Regional indicators.</p> <p>3.3 Measuring economic development and regional disparities.</p> <p>3.3.1 Development indices and regional disparities.</p> <p>3.3.2 Shift-Share analysis.</p> <p>3.4 Regional economics modelling.</p> <p>3.4.1 Income multiplier.</p> <p>3.4.2 Export-base multiplier.</p> <p>3.5 Input/output model. Multipliers.</p> <p>4. – Transport systems analysis</p> <p>4.1 Key elements</p> <p>4.2 Transport system and urban and regional economic organization relation.</p> <p>4.3 Network analysis</p> <p>4.5 Optimal solutions. Linear programming.</p> <p>4.6 Urban transportation model.</p> <p>5.- Urban systems analysis.</p> <p>5.1 Key elements and general theory.</p> <p>5.2 Urban network.</p> <p>5.3 Urban models.</p> <p>5.3.1 General approach</p> <p>5.3.2 Lowry model.</p> <p>5.3.3 Further developments.</p>		
Objectives and skills		
<p><i>Objectives:</i></p> <p>Provide instruments, methodologies and techniques for the analysis and comprehension of regional and urban systems;</p> <p>Promote a systemic and integrator approach on the regional and urban systems analysis.</p>		

Skills:

Ability to modelling and simulate the partial and global behaviours of territorial systems;
Ability to evaluate the impacts of territorial interventions.

References

ABREU, D. (1993) – *Programa de Análise Regional e Urbana*, CEG/UL, EPRU n.º 40, Lisboa

ABREU, D. (1988) – *Desenvolvimento Regional no Oeste. Problemas e Métodos*, FL/UL (Dissertação de Doutoramento)

ARMSTRONG, H.; TAYLOR, J. (2000) - *Regional Economics and Policy*, Blackwell Publishers. London, 3ª Ed

COSTA, J.S.; NIJKAMP, P. (coord.) (2009) – *Compêndio de Economia Regional*, APDR, Coimbra (2 volumes)

POLÈSE, M. (1998) – *Economia Urbana e Regional. Lógica Espacial das Transformações Económicas*, APDR, Coimbra

SIMÕES LOPES, A. (1980) – *Desenvolvimento Regional. 1. Problemática, Teoria, Modelos*, Fundação Calouste Gulbenkian, Lisboa

WILSON, A. G. (1980) – *Geografía y Planeamiento Urbano y Regional*, Oikos-Tau, Barcelona

WILSON, A. G. (2000) – *Complex Spatial Systems. The Modelling Foundations of Urban and Regional Analysis*. Prentice Hall, Harlow, UK.

Knowledge evaluation methods and their partial grades

Normal regime

- Written test (individual) – 55%
- Set of practical works (group) – 40%
- Individual appreciation 5%

Special regime

- Written test (individual) – 55%
- Practical work with discussion (individual) – 45%