

<b>Academic Year: 2017/2018</b>		
<b>Course: Risk and Vulnerability in the Territory</b>		
<b>Coordinator: José Luís Zêzere</b>		
<b>Teaching Staff: José Luís Zêzere, Ricardo Garcia</b>		
<b>ECTS: 6</b>	<b>Weekly Hours: 4h</b>	<b>Typology: Theoretical and Practical</b>
<b>Contents</b>		
<p>1. Disasters: Natural, Environmental and Technological; Extent and Impact. The evolution of paradigms, concepts and analytical approaches.</p> <p>2. The Conceptual Model of Risk: danger and hazard, exposure, vulnerability, resilience and coping capacity. Methods of hazard assessment and vulnerability evaluation.</p> <p>3. The classification of risks: natural, technological and environmental risks.</p> <p>4. Integration of concepts: Risk Analysis, Risk Assessment and Risk Management.</p> <p>5. The legislative framework of Risks: The international guidelines, the European Union policies. Risks policies for Civil Protection and Spatial Planning in Portugal - reactive vs preventive policies.</p> <p>6. Risk analysis in the practice of Spatial planning: Risks in PNPOT and PROT. The risk mapping at the municipal level in PDM and PME.</p>		
<b>Objectives and skills</b>		
<p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>- To understand the extent and impact of disasters on different scales.</li> <li>- To understand the evolution of paradigms and concepts of risk science.</li> <li>- To understand the conceptual model of risk.</li> <li>- To learn methods to assess hazard and vulnerability.</li> <li>- To learn the legislative framework and risk assessment practices within spatial planning.</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>- Capability to identify the evolution of paradigms and concepts associated with disaster risk.</li> <li>- Capability to identify the elements that constitute the conceptual model of risk and the methods used for their evaluation.</li> <li>- Capability to identify phenomena, processes and activities that generate risk at the municipal and national scale.</li> <li>- Capability to identify the treatment of risks in the legislative framework and in practice within the spatial planning.</li> </ul>		
<b>References</b>		
<p>Alexander, D. (2000) – Confronting Catastrophe. Terra Publishing, Harpenden, Hertfordshire.</p> <p>ISDR - United Nations International Strategy for Disaster Reduction (2003) – Living with Risk. A global review of disaster reduction initiatives. United Nations, Geneva.</p> <p>Julião, R.P.; Nery, F.; Ribeiro, J.L.; Castelo Branco, M.; Zêzere, J.L. (2009). Guia metodológico para a produção de cartografia municipal de risco e para a criação de sistemas de informação geográfica de base municipal. Autoridade Nacional de Protecção Civil, Direcção Geral do</p>		

Ordenamento do Território e Desenvolvimento Urbano, Instituto Geográfico Português.

Thywissen, K. (2006) – Components of Risk. A comparative Glossary. SOURCE, Studies of the University: Research, Counsel, Education, Publication Series of UNU-EHS, nº2, United Nations University.

Birkmann, J. (Ed.) (2006) – Measuring Vulnerability to Natural Hazards. Towards Disaster Resilient Societies. United Nations University Press, Tokyo.

#### Knowledge evaluation methods and their partial grades

##### Ordinary and Special Regimes

Final theoretical-practical test (60%)

Practical working group (3-4 students)

1st part (10%)

2nd part (10%)

3rd part (10%)

Oral presentation (10%)