

<b>Academic Year: 2019/2020</b>	
<b>Course: GIS Spatial Planning Project</b>	
<b>Docente coordenador: Nuno Marques da Costa</b>	
<b>Docentes: Nuno Marques da Costa; Paulo Morgado</b>	
<b>ECTS: 6    Weekly Hours: 3h    Typology: Theoretical-Practical</b>	
<b>Contents</b>	
<p>A. Overview</p> <ol style="list-style-type: none"> <li>1. Scientific project phases</li> <li>2. Building and Development of a GIS Project main principles</li> <li>3. Strategy components of a GIS Project</li> <li>4. GIS Project economy</li> <li>5. Methods and techniques for data validation</li> <li>6. Project based-learning and Problem based-learning: concepts, definitions and applications</li> </ol> <p>B. Design and development of a GIS Applied Project (Project based-learning and Problem based-learning methodologies)</p> <ol style="list-style-type: none"> <li>1. Components of the project</li> <li>2. GIS project tutorial and GIS project development</li> <li>3. Identify the methods that fits spatial issues</li> <li>4. Techniques and methods for monitoring and assessment results (ROI – Return of Investment)</li> <li>5. Making off “a scientific and technical report”</li> <li>6. Project’s communication (Pitch methodology)</li> </ol>	
<b>Objectives and skills</b>	
<p>Know how to design and implement a research project;  Define the main components of a GIS project;  Setting up the GIS project different phases;  Develop and implement a benchmarking assessment methodology;  Making of a scientific and technical GIS report.</p>	
<b>References</b>	
<p>ARMSTRONG, M., 2000 – “Geography and Computer Science”. <i>Annals of the Association of American Geographers</i>, 90 (1): 146-156.  CHORLEY, R., 1964 – “Geography and Analogue Theory”. <i>Annals of the Association of American Geographers</i>, 54 (1): 127-137.  COSME, A., 2012 – Projecto em Sistemas de Informação Geográfica. <i>Geomática</i>, Lidel, Lisboa. ISBN: 978-972-757-849-8  KLIFFORD, N.; FRENCH, S.; VALENTINE, G. (Editors) (2010) – <i>Key Methods in Geography</i>, 2<sup>nd</sup> ed. SAGE Publications. London.  LONGLEY, P., GOODCHILD, M., MAGUIRE, D. e RHIND, D., 2001 – <i>Geographic Information Systems and Science</i>. Willey.</p>	
<b>Knowledge evaluation methods and their partial grades</b>	
<p>2 complete script reviews: 30% (15% each one).  Classroom exercises: 30%.  1 Practical assignment (GIS Project guidelines): 40%.</p>	