

Academic Year: 2017/2018		
Course: Marine and coastal environments		
Coordinator: Ana Ramos Pereira		
Teaching Staff: Ana Ramos Pereira		
ECTS: 6	Weekly Hours: 4	Typology: Theoretical and Practical
Contents		
<ol style="list-style-type: none"> 1. Seas, Ocean and the coast <ol style="list-style-type: none"> 1.1. Concepts in marine hydrology 1.2. The spatial distribution of temperature and salinity 1.3. The global ocean circulation 1.4. The coastal ocean circulation 1.5. The division of marine space and its environment 2. Resources in marine and coastal environments <ol style="list-style-type: none"> 2.1. Energy resources (geological and climatic) 2.2. Biological habitats and resources (including aquaculture) 2.3. Protected marine areas 2.4. Tourist resources 3. Services provided by the seas and oceans <ol style="list-style-type: none"> 3.1. The nutrient recycling paper 3.2. The role of climate regulator 3.3. The role of global warming 4. Marine and coastal space hazards <ol style="list-style-type: none"> 4.1. The different types of pollution 4.2. Overcapacity of resources 4.3. Coastal erosion 		
Objectives and skills		
<p>Objectives:</p> <ul style="list-style-type: none"> • Provide baseline concepts on seas, oceans and littoral • Understanding marine and coastal dynamics • Recognize marine and coastal resources • Assess the services provided by the ocean and its importance in the framework of sustainable development <p>Skills:</p> <ul style="list-style-type: none"> • Develop scientific rigor • Ability to assess the sustainability of proposed actions (ocean / sea and coastal use) • Develop the capacity for group work and expression of results 		
References		
<p>Amanda Briney -Geography of the World's Oceans (http://geography.about.com/od/locateplacesworldwide/tp/fiveoceans.htm)</p> <p>American Meteorological Society (2012) - Investigations Manual. Ocean Studies. 9th Edition, Washington DC (ISBN 978-1-935704-97-3)</p> <p>K. Kevin T. Pickering, Hiscott Richard Nicholas, Frances F. J. Hein (1989) - Deep Marine Environments: Clastic Sedimentation and Tectonics. UnwinHyman (ISBN 0045511225, 9780045511228).</p> <p>Ramos-Pereira A. (2008) - <i>Programa de Sistemas Litorais: Dinâmicas e Ordenamento</i>. Linha de Investigação em DILF, DILIF-5, Centro de Estudos Geográficos, U.L., 110p. (ISBN: 978-972-636-183-1)</p> <p>Ramos-Pereira, Ana (2001) - O(s) Oceano(s) e as suas Margens. Instituto de Inovação Educacional, Cadernos de Educação Ambiental, nº5, Lisboa, 123p. (ISBN: 972-783-025-0).(http://slif.info.ul.pt/images/pdf/liv_oceanos_margens.pdf)</p> <p>Weisse, Ralf (2009) Marine Climate and Climate Change. Springer Jointly published with PraxisPublishing, UK (ISBN 978-3-540-68491-6)</p>		
Knowledge evaluation methods and their partial grades		
<p>Normal regime: 1 test (40%) + 2 group TP (20%+20%) and respective oral presentation (10%+10%)</p> <p>Special regime: • 1 theory test at the end - 50% • 1 individual practice tests - 50%</p>		