TEACHING MODULES INFORMATION
EMJMD WACOMA (academic year 2018/19)

1.	**Module Title:** Integrative management of wetlands and harbors
2.	**Module Code:** (not necessary yet)
3.	**Maximum Number of Students:** 25
4.	**Total ECTS Credits:** 2 ECTS
5.	**Month:** First year, second semester
6.	**Notional Learning Hours (Please fill a number in box)**: **(a) Contact Time - e.g in the classroom, or fieldwork** **(b) Private Study - reading time, preparing and taking assessments** **Format of Teaching:** Lectures 10 Hours (a) Laboratories or Practicals 4 Hours (a) Other (computer workshops) 0 Hours Other (tutorials) 4 Hours (a) Other (private study) 36 Hours (b) **Teaching Strategy:** Lectures – 14 Workshops – 0 Tutorials – 4
7.	**Convener:** Dr. Javier García Onetti
8.	**Institution:** University of Cadiz
9.	**Level (Please tick Y):** Master Degree
10.	**Language(s) of Tuition**: English
11.	**Pre-requisites:** It is unlikely that there will be prerequisites beyond the entrance qualifications for a science-based Masters programme.
12.	**Co-requisites:** None

13.	**Programme(s) for which module is core:** Erasmus Mundus Joint Master Degree in Water and Coastal Management (WACOMA)
14.	**Module Description - The Purpose or Aims:** 1. To provide the necessary training to understand the importance and the multidimensional particularities of the maritime-port sector, with special attention to the singularities of its management system and its relationship with coastal and marine management 2. To facilitate a methodology to understand the port socio-ecological impact, both positive and negative, in coastal and marine areas, as well as to delimit the different areas and dimensions of influence 3. To train for the implementation of tools that allow to bridge port management and integrated coastal and marine management 4. Strengthen the knowledge developed through examples and with the application of the techniques and methods explained to real cases
15.	**Learning Outcomes:** 1. Considering the coastal zone as an area of interaction between the socio-economic and physical-natural environments. 2. Understanding the interaction processes that occur between port systems and coastal and marine ecosystems. 3. Understanding ports and its surroundings as a socio-ecological system to deal with environmental problems. 4. Considering the problems of the socio-ecological port systems from an ecosystem and integrated approach to guarantee human well-being.
16.	**Summary of Course Content:** 1. Introduction to port coastal areas. Importance and particularities of the maritime-port sector and relationship with the integrated and ecosystem based approach. Ecosystem services in port coastal areas. Background and new frameworks. Debate on port territorial influence (5 hours) 2. Analysis of port systems from a socio-ecological perspective. Multidimensional influence, identifying its positive and negative impacts. Delimitation and characterization of socio-ecological port systems. Real examples and exercises (5 hours) 3. International initiatives for the environmental management of port systems. Group exercise: selection and analysis of port systems around the world with a socio-ecological perspective. Management considerations (4 hours).
17.	**Key Skills Taught:** 1. Develop integrated and ecosystem analysis of complex problems 2. To analyze the different variables and dimensions involved in the processes of port management and problems to coastal and marine management. 3. Communication and negotiation skills. 4. To make proposals 5. Leadership capacity and working with groups

18.	**Assessment Methods:** 1. Attendance and participation in theoretical and practical lessons 2. Exhibitions and / or defenses of exercises, themes and works
19.	**Assessment Criteria:** A successful candidate should have or be able to do the following: ***Threshold*** A basic understanding of the appropriate science and modelling approach and a reasonable understanding of the model results and their implications. ***Good*** A good understanding of the science and correct model results which are presented and interpreted to a good standard, with some reference to independent literature data and results. ***Excellent*** A good to excellent understanding of the science and correct model results which are presented and interpreted to a high standard, with plenty of references used for comparisons and to critically evaluate the results.

20.	**Resource Implications of Proposal and Proposed Solutions:** ***(Recommended Bibliography: compulsory, optional, other sources of information)*** Barragán, J.M., 2014. Política, Gestión y Litoral. Una Nueva Visión de la Gestión Integrada de Áreas Litorales. Tébar, Madrid (España). Barragán, J.M., 1995. Puerto, ciudad y espacio litoral en la Bahía de Cádiz. Las infraestructuras portuarias en la ordenación del espacio litoral de la Bahía de Cádiz. Autoridad Portuaria de la Bahía de Cádiz, Cádiz (España). Barragán, J.M., 1994. Las infraestructuras portuarias en ordenacion, planificación y gestión del espacio litoral. Boletín la Asoc. Geógrafos Españoles 19, 5–16. EC, 2011. EC Guidance on the implementation of the Birds and Habitats Directives in estuaries and coastal zones, with particular attention to port development and dredging. European Commission (EC). EC, 2006. COM(2006) 275 final. Towards a future Maritime Policy for the Union: A European Vision for the Oceans and Seas. Communication from the European Commission (EC). Elliott, M., 2011. Marine science and management means tackling exogenic unmanaged pressures and endogenic managed pressures – A numbered guide. Mar. Pollut. Bull. 62, 651–655. doi:10.1016/j.marpolbul.2010.11.033 ESPO, 2014. European Ports Work. European Sea Ports Organisation (ESPO). EU, 2014. Directive 2014/89/EU of the European Parliment and of the Council of 23 July 2014 establishing a framework for maritime spatial planning, Offical Journal of the European Union. Directive. Garcia-Sanabria, J., 2014. Hacia la gestión integrada del medio marino: análisis de un nuevo marco conceptual y metodológico. Universidad de Cádiz. Greenpeace, 2011. Destrucción a toda costa 2011. Un análisis de la situación de los Puertos del Estado. Grindlay, A.L., 2008. Ciudades y puertos. Ciudades 11, 55–80. Grindlay, A.L., 2001. Los puertos mediterráneos andaluces: centralidad urbana y dimensión territorial. Universidad de Granada. MEA, 2005. Ecosystems and Human Well-being: Synthesis, The Millennium Ecosystem Assessment. World Resources Institute. doi:10.1196/annals.1439.003 Merk, O., 2013. The competitiveness of global port-cities: synthesis report (No. 13), OECD Regional Development Working Papers, 2013. OECD Publishing, Paris (France). doi:http://dx.doi.org/10.1787/5k40hdhp6t8s-en Snelgrove, P.V.., Flitner, M., Urban Jr, E.R., Ekau, W., Glaser, M., Lotze, H.K., Philippart, C.J.M., Sompongchaiyakul, P., Yuwono, E., Melillo, J.M., others, 2009. Governance and management of ecosystem services in semi-enclosed marine systems, in: Scientific Comittee on Problems of the environment (SCOPE) (Ed.), Watersheds, Bays, and Bounded Seas: The Science and Management of Semi-Enclosed Marine Systems. Island Press, Washington, D.C., pp. 49–76.
21.	**Does this module replace existing provision? If so, please indicate modules to be replaced:** The module fits in the area of “Environmental Impacts and management”
22.	**Start Date:** First year, second semester
23.	**Is it intended that the module be available every year?** Yes