

STUDY GUIDE

Land-Sea-Ocean Interactions: From Coastal Management to Maritime Spatial Planning

Organised by

University of Cantabria (UC)

Originally developed in the context of

Creative Commons education materials created by the TRASMARES ERASMUS+ project (2019-1-ES01-KA203-065536, "Specialized training on applied tools for sustainable marine ecosystems"), coordinated by the University of Cantabria (UC)



1. IDENTIFYING DATA	
Course Name.	Land-Sea-Ocean Interactions: From Coastal Management to Maritime Spatial Planning
Coordinating University.	University of Cantabria (UC)
Course Field(s).	Sustainability
Related Study Programme.	Course included in the University Microcredential in Sustainable Marine Ecosystems (TRASMARES)
ISCED Code.	051101. Biology 053201. Marine sciences 053202. Land-marine planning 071201. Environmental engineering 073202. Civil engineering
Sustainable Development Goals	SDG 04. Quality education SDG 13. Climate action SDG 14. Life below water
Study Level.	MECU 7 (Master or 240 ECTS Degree)
Number of ECTS credits allocated.	2 ECTS
Mode of Delivery.	Online self-study
Language of Instruction.	English, with subtitles in Spanish, Italian and Portuguese
Course Dates.	03.10. 2025 – 19.12.2025
Schedule of the course.	The course can be attended from October until mid-December 2025 at any time. Course materials and assessment forms are fully online and can be checked at any point. Lectures are asynchronous and can be reviewed at any time
Key Words.	Ecosystem-based management, Integrated Coastal Zone Management, Maritime Spatial Planning, multiuse
Motivational Phrase.	Sustainable development and growth in the maritime sector require the integration of economic, social and environmental approaches.
Prerequisites and co-requisites.	No previous requirements established
Number of EUNICE students that can attend the Course.	Unlimited
Course inscription procedure(s).	Requires registration on the TRASMARES University Microcredential: https://web.unican.es/estudios/estudios-propios/informacion-estudios-propios-de-posgrado/detalle-estudios-propios?e=1116



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2. CONTACT DETAILS	
Department.	Environmental Hydraulics Institute (IHCantabria)
Name of Lecturer.	• José A Juanes (Coordinator) • Bárbara Ondiviela (Director)
E-mail.	ondiviela@unican.es
Other Lecturers.	Academic staff from UC-IHCantabria: • Dr. Carlos Vinicius • Dr. Elvira Ramos • MsC. María Merino International advisors from TRASMARES project: • Prof. Laura Airoidi (University of Padova) • Dr. Joao Neto (University of Coimbra) External contributors of CC materials from the TRASMARES project: • Prof. Javier Sanz (Univ. A Coruña) • Prof. Marta García (Univ. A Coruña)

3. COURSE CONTENT
Teaching materials of this MOOC were co-created, under creative commons licence, in the TRASMARES project “Specialized training on applied tools for sustainable marine ecosystems”, funded by the EU ERASMUS+ programme (2019-1-ES01-KA203-065536, 2019-22) and developed through the collaboration of academics and researchers from the Environmental Hydraulics Institute of the University of Cantabria, coordinator of the project, the University of Bologna and the University of Coimbra. This course reviews the legal framework that applies to the oceans, from the Romans to the present day, the main approaches and fundamentals that form the basis of marine and coastal management, as well as the most relevant aspects for the design and implementation of coastal zone management plans. It also presents the IOC-UNESCO approach to marine spatial planning and the main phases and steps to address new and emerging actions related to ecosystem-based ocean management.



4. LEARNING OUTCOMES

Students will learn about the development and application of marine spatial planning processes around the world and gain a detailed understanding of some of the most innovative methodologies and tools available for marine and coastal management.

5. OBJECTIVES

This course aims at presenting the legal framework that regulates the development of different activities in the coast and marine zone, using the analysis of some of the most representative coastal management tools and practical cases of real application throughout the world.

6. COURSE ORGANISATION

UNITS

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| 1. | Legal framework: from the Romans to the present day |
| 2. | Conceptual framework |
| 3. | Integrated Coastal Zone Management (ICZM) |
| 4. | Marine spatial planning processes |
| 5. | Marine spatial planning in practice |

LEARNING RESOURCES AND TOOLS

The learning resources and assessment tools of the course are available at the UC Moodle platform.

PLANNED LEARNING ACTIVITIES AND TEACHING METHODS

Students will have access to video materials, written course contents, and automatic online evaluation tests in Moodle online environment. Students can review the materials and do the assessments at their own pace during the period of course delivery since. The course is asynchronous and can be reviewed at any time. Students' activity in Moodle is expected to consist of the following:

- Watching the video materials available on the course site.
- Reading and familiarisation with the text materials available on the course site.
- Taking the evaluation tests that measure students' knowledge and skills in content areas.

The course is completed by independently working and by taking the exams which consists of multiple-choice questions covering the course topics. The course is graded "passed" or "failed".



As an additional optional activity, each sub-topic will have a forum for students to share their questions, discussions or doubts. It will be moderated by the professors when necessary. All students are free to participate and post their queries.

7. ASSESSMENT METHODS, CRITERIA AND PERIOD

To complete the course, you must:

- View the materials in each Module, going through all Sub-Topics.
- Correctly answer at least 50% of each of the Automatic Online Assessments.
- Complete the post-survey of the course.

OBSERVATIONS

8. BIBLIOGRAPHY AND TEACHING MATERIALS

Teaching materials are available on the course at the dedicated Moodle platform. Literature recommendations are also outlined in the course contents.

