Integrated Coastal Zone Management and Marine Spatial Planning

COURSE OUTLINE

GENERAL

SCHOOL	Maritime and Industrial Studies
ACADEMIC UNIT	Maritime Studies
LEVEL OF STUDIES	Postgraduate
COURSE CODE	**SEMESTER** 1
COURSE TITLE	Integrated Coastal Zone Management and Marine Spatial Planning

INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*	**WEEKLY TEACHING HOURS**	**CREDITS**
Lectures	3	7.5

Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Special background
PREREQUISITE COURSES:	
LANGUAGE OF INSTRUCTION and EXAMINATIONS: IS THE COURSE OFFERED TO ERASMUS STUDENTS COURSE WEBSITE (URL)	English

LEARNING OUTCOMES

Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

Upon successful completion of the course, postgraduate students will

- Understand the importance, sensitivity, and vulnerability of the coastal zone (comprehension).
- Know and understand the objectives and feasibility of integrated coastal zone management (ICZM) (knowledge & comprehension).
- Know and understand the importance of the MSP tool and its use (comprehension, synthesis)
- Understand the parameters related to coastal zone management and the difficulty in its implementation (perception & evaluation)

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	*Project planning and management*
Adapting to new situations	*Respect for difference and multiculturalism*
Decision-making	*Respect for the natural environment*
Working independently	*Showing social, professional and ethical responsibility and sensitivity to gender issues*
Team work	*Criticism and self-criticism*
Working in an international environment	*Production of free, creative and inductive thinking*
Working in an interdisciplinary environment	*……*
Production of new research ideas	*Others…*
	…….

Individual work
Teamwork
Decision-making
Respect for the natural environment
Adaptation to new situations
Promotion of free, creative, and inductive thinking
Work in an interdisciplinary environment
Project planning and management

SYLLABUS

- ✓ Coastal zone definition. Categories and characteristics of coastal ecosystems. Importance of coastal zone. Agenda 2030.
- ✓ The Greenhouse effect. Weather and climate. Sea level rise. Potential impacts of climate change and sea-level rise on coastal systems. Coastal defense management and planning.
- ✓ Ecological and economic services of marine ecosystems. Main problems in coastal zones. Multiple stressors.
- ✓ Sustainability spheres. ICZM definition and issues. General concept for ICM. The ICZM process. The integrated approach “horizontal”, “vertical”, “spatial”, “scientific” integration. Examples. ICZM dimensions.
- ✓ The ecosystem approach. The ecosystem-based management. Examples.
- ✓ Measurable ICZM indicators.
- ✓ Problems and challenges at European coasts. Sectors and their pressures on the Mediterranean marine ecosystems. Main trends in the Mediterranean.
- ✓ MSP definition.
- ✓ EU Marine Strategy Framework Directive. EU Marine Spatial Planning Directive. MSP in the EU.
- ✓ Elements of the MSP process. Challenges in moving from planning to implementation. MSP and management process in steps.

TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Distance learning,
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	Use of computers and the Internet. Support of the learning process through the ms-teams online platform.
TEACHING METHODS *The manner and methods of teaching are described in detail.* *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.* *The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS*	

Activity	***Semester workload***
Lectures	25
Project	10
Study	112.5
Course total	***187.5***

STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure* *Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other* *Specifically-defined evaluation criteria are given, and if and where they are* *accessible to students.*	Written final exam (60%) in English. Project preparation, with submission of written report, oral presentation, and examination (40%).

ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

- ✓ Christie P, Lowry K, White A, Oracion EG, Sievanen L, Pomeroy RS, et al., 2005. Key findings from a multidisciplinary examination of integrated coastal management process sustainability. Ocean Coast Manag., 48, pp.468-483.
- ✓ European Union, 2014. Directive 2014/89/EU of the European Parliament and of the Council establishing a framework for maritime spatial planning. Official Journal of the European Union
- ✓ Garriga M, Losada IJ., 2010. Education and training for integrated coastal zone management in Europe. Ocean Coast Manage. 53, pp.89-98.
- ✓ Gilliland P.M. and Laffoley D., 2008. Key elements and steps in the process of developing ecosystem-based marine spatial planning. Marine Policy 32: 787-796.
- ✓ Paice R., and Chambers J, 2016: Climate change impacts on coastal ecosystems. CoastAdapt Impact Sheet 8, National Climate Change Adaptation Research Facility, Gold Coast.
- ✓ Pickaver A.H., Gilbert C., Breton F., 2004 An indicator set to measure the progress in the implementation of integrated coastal zone management in Europe. Ocean Coast. Manag., 47, pp.449-462,10.1016/j.ocecoaman.2004.06.001
- ✓ Portman ME, Esteves LS, & Le XQ, Khan AZ, 2012. Improving Integration for Integrated Coastal Zone Management: An Eight Country Study. The Science of the total environment. 439C. 194-201. 10.1016/j.scitotenv.2012.09.016.
- ✓ Pournara A and Sakellariadou F, 2022. Development of a Protocol for a Sustainable Blue Economy in the Coastal Zone: Case Study and Preliminary Results in a Coastal Industrial Area in the Eastern Mediterranean. *Sustainability*, 14, 10323. https://doi.org/10.3390/su141610323

- ✓ N Environment (2018). Conceptual guidelines for the application of Marine Spatial Planning and Integrated Coastal Zone Management approaches to support the achievement of Sustainable Development Goal Targets 14.1 and 14.2. UN Regional Seas Reports and Studies No. 207. 58pp
- ✓ Professor's power point presentations

- *Related academic journals:*

Coastal management
Ocean and coastal management
Journal of coastal management
Sustainability