COURSE DESCRIPTION

Course Title	**MARINE ECOSYSTEMS, THREATS AND MANAGEMENT**				
Course Code	ATSE301				
Course Type	Elective				
Level	BSc (Level 1)				
Year / Semester	3 or 4 / Fall or Spring				
Teacher's Name	Dr. Demetris Kletou				
ECTS	6	Lectures / week	3	Laboratories/week	
Course Purpose	This course provides students with basic knowledge on the marine environment, on major threats imposed on marine ecosystems by anthropogenic activities and on international management efforts to halt the biodiversity loss and mitigate impacts on the marine environment. Students will realize the challenges, sustainability goals and blue growth opportunities to achieve a better future for all. The general aim is to raise the environmental awareness and prepare candidates for a career where environmental sustainability matters, and blue growth is a high priority.				
Learning Outcomes	By the end of the course, students should be able to: • Identify and describe the main pelagic and benthic marine zones and ecosystems, and discuss the marine ecosystem services. • Explain and assess how the marine environment is adversely affected by major anthropogenic pressures such as fishing and aquaculture, agriculture, industrialisation, urbanisation and tourism, marine litter, exploitation of oil and gas, maritime transport etc. Many of these impacts are exacerbated by climate change. • Outline the international legislatory framework related to marine environmental protection. • Appreciate the management challenges on protecting marine ecosystems. • Learn about the UN sustainable development goals, clusters and blue growth.				
Prerequisites	None		Corequisites	None	
Course Content	*Marine ecosystems* • Oceanography • Pelagic and Benthic biodiversity and ecosystems • Marine ecosystem services *Anthropogenic Impacts* • Climate change • Fisheries and Aquaculture • Coastal developments and land-based activities • Marine litter & Invasive species				

	• Shipping & Oil and Gas *Management* • International legal framework for marine environmental protection & Challenges in implementing strategies and measures *Sustainability* • Sustainable Development Goals, Clusters and Blue Growth
Teaching Methodology	Lectures include PowerPoint presentations and discussions.
Bibliography	Salomon, Markus, and Till Markus, eds. *Handbook on Marine Environment Protection: Science, Impacts and Sustainable Management.* Springer, 2018. Volumes 1-2, Pages 1-1023, ISBN: 978-3-319-60156-4, doi: 10.1007/978-3-319-60156-4
Assessment	Mid-term Exam 20% Attendance and Participation 10% Presentation on a related topic 10% Final Exam 60%
Language	English