

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	School of Engineering		
<b>ACADEMIC UNIT</b>	Department of Naval Architecture		
<b>LEVEL OF STUDIES</b>	Undergraduate		
<b>COURSE CODE</b>	NAOME1359	<b>SEMESTER</b>	8 <sup>o</sup>
<b>COURSE TITLE</b>	<b>SAFETY, QUALITY AND ENVIRONMENT IN SHIPPING</b>		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS (ECTS)</b>
<b>Lectures</b>		3	4
<b>COURSE TYPE</b> <i>general background, specialbackground, specialised general knowledge, skills development</i>	Specialised		
<b>PREREQUISITE COURSES:</b>			
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	Greek		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	Yes (English)		
<b>COURSE WEBSITE (URL)</b>	<a href="https://eclass.uniwa.gr/courses/NAFP131/">https://eclass.uniwa.gr/courses/NAFP131/</a>		

### (2) COURSE GOALS / LEARNING OUTCOMES

The main goal of the course is to provide students with fundamental knowledge of the shipping regulatory framework on issues related to safety, quality and environmental protection and prevention of marine pollution from ships.

The course highlights the roles of various public and private organisations regulating and influencing the maritime industry. Emphasis is given to the description of international conventions, codes, directives, recommendations, and other regulations adopted by the International Maritime Organization (IMO) and European Union and their implementation at national, European and international level. Moreover, during the course students will develop a basic understanding of the role of classification societies, flag and port states and how shipping companies develop strategies to ensure safe navigation and environmental protection in a global shipping industry, which is constantly changing. It also describes the ISO standards for quality and environmental management that are applied to several shipping companies to upgrade the quality of their services.

### (3) COURSE CONTENT / SYLLABUS

<ul style="list-style-type: none"> <li>• Introduction to the international regulatory framework of shipping</li> <li>• The International Maritime Organization (IMO) and international conventions (SOLAS, MARPOL, STCW, etc.)</li> <li>• Safety and quality management standards and systems in the maritime industry</li> <li>• International Safety Management (ISM) Code</li> <li>• The International Ship and Port Facility Security (ISPS) Code - Crisis Management</li> <li>• IMO and European regulations for environmental protection</li> <li>• Shipping company (fleet, structure, departments, operating organization, ship and company communication, monitoring, inspections)</li> <li>• Verification, Inspection, Classification societies</li> <li>• Flag and Port States, Port state controls</li> <li>• The implementation of ISO standards (ISO 9001, ISO 14001) in shipping</li> </ul>
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### (4) TEACHING and LEARNING METHODS - EVALUATION

<b>DELIVERY</b> Face-to-face, Distance learning, etc.	Face-to-face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> Use of ICT in teaching, laboratory education, communication with students	<ul style="list-style-type: none"> <li>• Use of ICT in teaching.</li> <li>• Communication with students and support of learning procedure through the electronic e-class platform.</li> </ul>	
<b>TEACHING METHODS</b> <i>The manner and methods of teaching are described in detail.</i> <i>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.</i> <i>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</i>	<b>Activity</b>	<b>Workload (hours)</b>
	Lectures	26
	Seminars	26
	Project and essay writing	39
	Study and analysis of bibliography	26
	Course total	<b>117</b>
<b>STUDENT PERFORMANCE EVALUATION</b> <i>Description of the evaluation procedure</i> <i>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</i>	Evaluation: -Written examination including short-answer questions, multiple choice questionnaires, etc	

## (5) ATTACHED BIBLIOGRAPHY

- Tan A. K.J, 2006.Vessel Source Marine Pollution. The Law and Politics of International Regulation, Cambridge University Press, Cambridge.
- Sturmev, SG, 1970. A consideration of the ends and means of national shipping policies. In S.G. Sturmev, Shipping Economics Collected Papers. London: The Macmillan Press.
- Karin Andersson, Selma Brynolf, J. Fredrik Lindgren, Magda Wilewska-Bien, 2016, "Improving Environmental Performance in Marine Transportation"  
<https://link.springer.com/book/10.1007/978-3-662-49045-7>
- Y.H. Venus Lun, Kee-hung Lai, Christina W.Y. Wong, T. C. E. Cheng, 2016, "Green Shipping Management" <https://link.springer.com/book/10.1007/978-3-319-26482-0>
- Md Saiful Karim, 2015, "Prevention of Pollution of the Marine Environment from Vessels"  
<https://link.springer.com/book/10.1007/978-3-319-10608-3#about>