COURSE OUTLINE

(1) General information

FACULTY/SCHOOL	Maritime and Industrial Studies		
DEPARTMENT	Maritime Studies		
LEVEL OF STUDY	Undergraduate		
COURSE UNIT CODE	ΝΑΑΓΓ45	**SEMESTER**	7th semester elective
COURSE TITLE	RISK MANAGEMENT IN SHIPPING AND TRANSPORT		
INSTRUCTOR'S NAME	Asst. Professor Peter J. Stavroulakis		
INDEPENDENT TEACHING ACTIVITIES *in case credits are awarded for separate components/parts of the course, e.g. in lectures, laboratory exercises, etc. If credits are awarded for the entire course, give the weekly teaching hours and the total credits*		**WEEKLY TEACHING HOURS**	**CREDITS**
Lectures and coursework		4	6
Add rows if necessary. The organization of teaching and the teaching methods used are described in detail under section 4			
COURSE TYPE *Background knowledge, Scientific expertise, General Knowledge, Skills Development*	Scientific expertise		
PREREQUISITE COURSES:	None		
LANGUAGE OF INSTRUCTION:	English		
LANGUAGE OF EXAMINATION/ASSESSMENT:			
THE COURSE IS OFFERED TO ERASMUS STUDENTS	YES		
COURSE WEBSITE (URL)	https://eclass.unipi.gr/courses/NAS479/		

(2) LEARNING OUTCOMES

Learning Outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate (certain) level, which students will acquire upon successful completion of the course, are described in detail.

It is necessary to consult:

APPENDIX A

- *Description of the level of learning outcomes for each level of study, in accordance with the European Higher Education Qualifications' Framework.*
- *Descriptive indicators for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and*

APPENDIX B

- *Guidelines for writing Learning Outcomes*

The goals of this module are to introduce the different aspects of transportation / maritime risk (human factors, accident analysis, emergency preparedness, safety management), along with strategies, concepts, frameworks, models, and methodologies to assess risk, employ a risk management system perspective, and adequately understand the impact of risk in sustainability.

By the end of the module, it is expected that the students will be able to:

- Understand the basic concepts and complexity of risk in transportation and shipping
- Apply and analyze risk management concepts
- Be able to assess and conduct an accident analysis
- Analyze sustainability from a risk management perspective

General Competences

Taking into consideration the general competences that students/graduates must acquire (as those are described in the Diploma Supplement and are mentioned below), at which of the following does the course attendance aim?

Search for, analysis and synthesis of data and information by the use of appropriate technologies,
Adapting to new situations
Decision-making
Individual/Independent work
Group/Team work
Working in an international environment
Working in an interdisciplinary environment
Introduction of innovative research
Project planning and management
Respect for diversity and multiculturalism
Environmental awareness
Social, professional and ethical responsibility and sensitivity to gender issues
Critical thinking
Development of free, creative and inductive thinking
……
(Other…….citizenship, spiritual freedom, social awareness, altruism etc.)
…….

- Search for, analysis and synthesis of data and information by the use of appropriate technologies
- Adapting to new situations
- Decision-making
- Individual/Independent work
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- Working in an interdisciplinary environment
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- Development of free, creative, and inductive thinking

(3) COURSE CONTENT

- Risk aspects, conditions, perceptions, levels, concepts, and dimensions
- Safety and security, hazard and risk
- Shipping and environmental risk
- Threats and hazards in maritime activities
- Safety culture and management
- Risk management models and instruments
- Risk analysis and statistical monitoring
- The human paradox and cognitive errors
- Transportation and pandemics

- Human factors and ergonomics
- The sharp and blunt end of systems - tractable and intractable systems
- Damage estimation
- Disaster preparedness and response
- Legislation in response to disasters and milestones in maritime security
- Piracy
- Accident analysis and response case studies (RMS Titanic, MS Scandinavian Star, MV Samho Dream, Maersk Alabama, Piper Alpha, Exxon Valdez, Tempi train crash, Air France Flight 8969, Boeing 737 MAX accidents, Tenerife disaster, Helios flight 522, Olympic Air flight 411, Hymettus ring road)

(4) TEACHING METHODS--ASSESSMENT

<table>
<tr><td>MODES OF DELIVERY
Face-to-face, in-class lecturing, distance teaching and distance learning etc.</td><td>Face-to-face and provision for synchronous distance learning in cases of force majeure and/or extraordinary circumstances (as per Law 4957/2022, A76, Par. E)</td></tr>
<tr><td>USE OF INFORMATION AND COMMUNICATION TECHNOLOGY
Use of ICT in teaching, Laboratory Education, Communication with students</td><td>▪ Asynchronous e-class learning platform
▪ PowerPoint presentations
▪ Organization of guest lectures, in-depth courses, and tutorials via MS Teams
▪ FEMA ‘You Are the Help Until Help Arrives’ webinar with personalized certificate</td></tr>
<tr><td>COURSE DESIGN
Description of teaching techniques, practices and methods:
Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, Internship, Art Workshop, Interactive teaching, Educational visits, projects, Essay writing, Artistic creativity, etc.

The study hours for each learning activity as well as the hours of self-directed study are given following the principles of the ECTS.</td><td><table><tr><th>Activity/Method</th><th>Semester workload</th></tr><tr><td>Lectures</td><td>48</td></tr><tr><td>Written project (individual)</td><td>52</td></tr><tr><td>FEMA Webinar</td><td>2</td></tr><tr><td>Self-guided study</td><td>48</td></tr><tr><td>Total</td><td>150</td></tr></table></td></tr>
<tr><td>STUDENT PERFORMANCE EVALUATION/ASSESSMENT METHODS
Detailed description of the evaluation procedures:

Language of evaluation, assessment methods, formative or summative (conclusive), multiple choice tests, short- answer questions, open-ended questions, problem solving, written work, essay/report, oral exam, presentation, laboratory work, other……etc.</td><td>Written final examination (100%)</td></tr>
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Specifically defined evaluation criteria are stated, as well as if and where they are accessible by the students.	

(5) SUGGESTED BIBLIOGRAPHY:

Suggested bibliography

- Maritime Transportation, Safety Management and Risk Analysis
- Safety-I and Safety-II, The Past and Future of Safety Management
- Εργονομία και Συστήματα Διαχείρισης Ασφάλειας και Υγείας, 3η Έκδοση, Συγγραφείς: Κοντογιάννης Θωμάς, ISBN: 9789604189045, Κωδικός Βιβλίου στον Εύδοξο: 102072191
- SOLAS training manual lifesaving appliances & survival techniques
- Seafarers' personal safety guide
- Lecture notes

International Journals

- Journal of Safety Research
- Journal of Transportation Safety & Security