## **COURSE OUTLINE**

## (1) General information

FACULTY/SCHOOL	Maritime and Industrial Studies			
DEPARTMENT	Maritime Studies			
LEVEL OF STUDY	Undergraduate			
COURSE UNIT CODE	ΝΑΑΓΓ45	SEMESTER Spring semester elective		
COURSE TITLE	RISK MANAGEMENT IN SHIPPING AND TRANSPORT			
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 TEACHNG CREDITS HOURS		
		4	6	
Add rows if necessary. The organization of teaching and the teaching methods used are described in detail under section 4				
Background knowledge, Scientific expertise, General Knowledge, Skills Development  PREREQUISITE COURSES:	Scientific expertise			
LANGUAGE OF INSTRUCTION:	English			
LANGUAGE OF EXAMINATION/ASSESSMENT:	English			
THE COURSE IS OFFERED TO ERASMUS STUDENTS	Yes			
COURSE WEBSITE (URL)				

## (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

#### **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

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(Other.....citizenship, spiritual freedom, social

awareness, altruism etc.)

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

• Understand risk-return trade-offs and identify the sources of business risks in the shipping markets.

- Explore the underlying assets of shipping derivatives and evaluate a wide set of such derivatives products.
- Implement hedging strategies by trading derivatives products in shipping.
- Manage shipping related risk exposures by evaluating the hedging effectiveness of shipping derivatives.
- Develop, appraise and implement shipping related risk management strategies.
- Apply advanced option trading strategies in shipping.

#### (3) COURSE CONTENT

- Sources of Business Risks in Shipping and Traditional Risk Management
  Business Risk, Physical Risk, Freight Rate Risk, Vessel Price Risk, Credit Risk,
  Interest rate Risk, Currency Risk
- Underlying Assets of Shipping Derivatives
   Baltic Exchange Indices, Routes, Vessels, Container Markets
- Freight Rate Risk Management: Dry-bulk, Tanker and Container FFAs,
   Freight Futures & Derivatives Exchanges
   Freight Futures, Clearing Houses, Trading FFA's, FFA Brokers
- Basis Risk, Settlement Risk and Hedging Error
   Differences of FFA's with underlying markets, Hedging Efficiency
- Freight Options Contracts and their Mechanics
   Freight Option Trading Strategies
- Bunker Rate Risk Management
   Bunker Markets, Singapore, Rotterdam, Crude Oil
- Credit Risk and Market Risk in Shipping Markets

Types of Credit risk, Value at Risk, Expected Shortfall, Credit Derivatives, Interest Rate and Foreign Exchange Derivatives

# (4) TEACHING METHODS--ASSESSMENT

MODES OF DELIVERY  Face-to-face, in-class lecturing, distance teaching and distance	Face to face	
learning etc.  USE OF INFORMATION AND COMMUNICATION TECHNOLOGY Use of ICT in teaching, Laboratory Education, Communication with students	TBD	
COURSE DESIGN  Description of teaching techniques, practices and methods:  Lectures, seminars, laboratory practice, fieldwork, study and analysis	Activity/Method	Semester workload
	Lecture	46
	Non-guided study	79
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-	Total	125
directed study are given following the		
principles of the ECTS.		
STUDENT PERFORMANCE		
EVALUATION/ASSESSMENT	Final Exam 100%.	
METHODS  Detailed description of the evaluation		
Detailed description of the evaluation procedures:		
p. 55544.55.		
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,		
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Considerable defined to the control of the control		
Specifically defined evaluation criteria are stated, as well as if and where		
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#### (5) SUGGESTED BIBLIOGRAPHY:

- Suggested bibliography:
- Kavussanos, M. and Visvikis, I (2006), Derivatives and Risk Management in Shipping, Witherbys Publishing and Seamanship International, UK.
- Other Textbooks and Key References
- Kavussanos M.G. and Tsouknidis D.A., (2019), "Credit Risk Analysis, Measurement and Management in the Shipping Industry", in P. M. Panayides (Ed), Handbook in Maritime Management, Routledge Taylor and Francis.
- Kavussanos, M.G., Visvikis, I.D., (2016), The International Handbook of Shipping Finance: Theory and Practice. Chapter 15. Palgrave Macmillan Publishers, London.
- Kavussanos, M. and Visvikis, I (2011), Theory and Practice of Shipping Freight Derivatives, Risk Books, Incisive Media, UK.
- Kavussanos, M., Visvikis, I. and Dimitrakopoulos, D. (2015): "Freight Markets and Products", (In Eds.) Roncoroni, A., Fusai, G. and Cummins, M., The Handbook of Multi-Commodity Markets and Products: Structuring, Trading and Risk Management, John Wiley & Sons Limited.