

## COURSE OUTLINE

### (1) GENERAL

|                                                                                                                                                                                                                                                                       |                                |                              |                |
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| <b>SCHOOL</b>                                                                                                                                                                                                                                                         | Shipping and Industry          |                              |                |
| <b>ACADEMIC UNIT</b>                                                                                                                                                                                                                                                  | Department of Maritime Studies |                              |                |
| <b>LEVEL OF STUDIES</b>                                                                                                                                                                                                                                               | Undergraduate                  |                              |                |
| <b>COURSE CODE</b>                                                                                                                                                                                                                                                    | <b>NAS 441</b>                 | <b>SEMESTER</b>              | <b>8</b>       |
| <b>COURSE TITLE</b>                                                                                                                                                                                                                                                   | Financial Risk Management      |                              |                |
| <b>INDEPENDENT TEACHING ACTIVITIES</b><br><i>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</i> |                                | <b>WEEKLY TEACHING HOURS</b> | <b>CREDITS</b> |
|                                                                                                                                                                                                                                                                       |                                | 3                            | 6              |
|                                                                                                                                                                                                                                                                       |                                |                              |                |
|                                                                                                                                                                                                                                                                       |                                |                              |                |
| <i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>                                                                                                                                              |                                |                              |                |
| <b>COURSE TYPE</b><br><i>general background, special background, specialised general knowledge, skills development</i>                                                                                                                                                | Special background             |                              |                |
| <b>PREREQUISITE COURSES:</b>                                                                                                                                                                                                                                          | None                           |                              |                |
| <b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>                                                                                                                                                                                                                      | Greek                          |                              |                |
| <b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>                                                                                                                                                                                                                      | No                             |                              |                |
| <b>COURSE WEBSITE (URL)</b>                                                                                                                                                                                                                                           |                                |                              |                |

### (2) LEARNING OUTCOMES

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <p><b>Learning outcomes</b></p> <p><i>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.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> <li>• Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</li> <li>• Descriptors for Levels 6, 7 &amp; 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</li> <li>• Guidelines for writing Learning Outcomes</li> </ul> |
| <p><b>Upon completing this course, the student will be able to:</b></p> <ul style="list-style-type: none"> <li>- Understand the fundamental principles of risk management in money markets and capital markets</li> <li>- Apply portfolio diversification techniques in risk management</li> <li>- Price securities</li> <li>- Assess portfolio management performance</li> <li>- Calculate Value-at-Risk</li> <li>- Employ financial derivatives for the purpose of risk management</li> <li>- Price financial derivatives</li> <li>- Apply credit risk management techniques</li> </ul>                                                                                      |

### 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*

*Adapting to new situations*

*Decision-making*

*Working independently*

*Team work*

*Working in an international environment*

*Working in an interdisciplinary environment*

*Production of new research ideas*

*Project planning and management*

*Respect for difference and multiculturalism*

*Respect for the natural environment*

*Showing social, professional and ethical responsibility and sensitivity to gender issues*

*Criticism and self-criticism*

*Production of free, creative and inductive thinking*

*.....*

*Others...*

*.....*

### Decision-making

Search for, analysis and synthesis of data and information, with the use of the necessary technology

Working independently

Production of free, creative and inductive thinking

### (3) SYLLABUS

Week 1 – Introduction to risk management

Week 2 – Fundamental elements of portfolio management

Week 3 – Equilibrium models in money markets and capital markets

Week 4 – Portfolio performance evaluation

Week 5 – Risk management: Value-at-Risk

Week 6 – Forwards and futures

Week 7 – Options and swaps

Week 8 – Financial derivatives: Valuation

Week 10 – Credit risk management

Week 11 – Special topics in risk management

Week 12 – Financial crises

Week 13 - Recap

#### (4) TEACHING and LEARNING METHODS - EVALUATION

| <b>DELIVERY</b><br><i>Face-to-face, Distance learning, etc.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |                          |          |    |         |    |                    |    |  |  |  |  |  |  |  |  |  |  |  |  |              |     |
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| <b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b><br><i>Use of ICT in teaching, laboratory education, communication with students</i>                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |                          |          |    |         |    |                    |    |  |  |  |  |  |  |  |  |  |  |  |  |              |     |
| <b>TEACHING METHODS</b><br><i>The manner and methods of teaching are described in detail.</i><br><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><br><br><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>                             | <table> <tr> <th data-bbox="692 450 1031 488"><i>Activity</i></th><th data-bbox="1031 450 1369 488"><i>Semester workload</i></th></tr> <tr> <td data-bbox="692 488 1031 526">Lectures</td><td data-bbox="1031 488 1369 526">52</td></tr> <tr> <td data-bbox="692 526 1031 564">Project</td><td data-bbox="1031 526 1369 564">38</td></tr> <tr> <td data-bbox="692 564 1031 602">Non-directed study</td><td data-bbox="1031 564 1369 602">20</td></tr> <tr> <td data-bbox="692 602 1031 640"></td><td data-bbox="1031 602 1369 640"></td></tr> <tr> <td data-bbox="692 640 1031 678"></td><td data-bbox="1031 640 1369 678"></td></tr> <tr> <td data-bbox="692 678 1031 716"></td><td data-bbox="1031 678 1369 716"></td></tr> <tr> <td data-bbox="692 716 1031 754"></td><td data-bbox="1031 716 1369 754"></td></tr> <tr> <td data-bbox="692 754 1031 792"></td><td data-bbox="1031 754 1369 792"></td></tr> <tr> <td data-bbox="692 792 1031 831"></td><td data-bbox="1031 792 1369 831"></td></tr> <tr> <td data-bbox="692 831 1031 857">Course total</td><td data-bbox="1031 831 1369 857">150</td></tr> </table> | <i>Activity</i> | <i>Semester workload</i> | Lectures | 52 | Project | 38 | Non-directed study | 20 |  |  |  |  |  |  |  |  |  |  |  |  | Course total | 150 |
| <i>Activity</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <i>Semester workload</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                 |                          |          |    |         |    |                    |    |  |  |  |  |  |  |  |  |  |  |  |  |              |     |
| Lectures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 52                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                          |          |    |         |    |                    |    |  |  |  |  |  |  |  |  |  |  |  |  |              |     |
| Project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                          |          |    |         |    |                    |    |  |  |  |  |  |  |  |  |  |  |  |  |              |     |
| Non-directed study                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |                          |          |    |         |    |                    |    |  |  |  |  |  |  |  |  |  |  |  |  |              |     |
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| Course total                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 150                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                 |                          |          |    |         |    |                    |    |  |  |  |  |  |  |  |  |  |  |  |  |              |     |
| <b>STUDENT PERFORMANCE EVALUATION</b><br><i>Description of the evaluation procedure</i><br><br><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><br><br><i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i> | Project 20%<br>Written exams 80%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                 |                          |          |    |         |    |                    |    |  |  |  |  |  |  |  |  |  |  |  |  |              |     |

#### (5) ATTACHED BIBLIOGRAPHY

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| <p>- <i>Suggested bibliography:</i><br/> Hull, J.C. 2018. Risk management and financial institutions. 5<sup>th</sup> Edition, Wiley.<br/> Hull, J.C. 2021. Futures, options and other derivatives. 11<sup>th</sup> Edition. Pearson.</p> <p>- <i>Related academic journals:</i><br/> Journal of Finance<br/> Journal of Futures Markets<br/> Journal of Portfolio Management<br/> Journal of Banking and Finance<br/> Review of Derivatives Research</p> |
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