COURSE OUTLINE

(1) General information

| FACULTY/SCHOOL | School of Maritime & Industrial Studies | | |
|--|---|----------------------------|-----------|
| DEPARTMENT | Department of Maritime Studies | | |
| LEVEL OF STUDY | Undergraduate | | |
| COURSE UNIT CODE | NA105 | SEMESTER | 1st |
| COURSE TITLE | Ship Technology | | |
| 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 TEACHNG HOURS | CREDITS |
| | | | 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 PREREQUISITE COURSES: | Background knowledg | e | |
| | Creat | | |
| LANGUAGE OF INSTRUCTION: | Greek | | |
| LANGUAGE OF EXAMINATION/ASSESSMENT: | | | |
| THE COURSE IS OFFERED TO ERASMUS STUDENTS | Yes | | |
| COURSE WEBSITE (URL) | https://eclass.unipi.gr/c | ourses/NAS126 | <u>6/</u> |

(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?

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

Decision-making, environmental awareness, critical thinking

(3) COURSE CONTENT

- Basic classification of ships based on:
 - a) cargo types and
 - b) floating/moving technique.
- Ship terminology
- Transverse and longitudinal ship stability
- Loss of ship stability due to cargo shift or water ingress
- Ship loading conditions and load lines
- Ship design and construction
- Design, structural and operational characteristics of basic ship types:
 - general cargo carrier
 - multi-purpose
 - refrigeration ship (reefer)
 - unitized cargo carriers: container ship, barge carrier, Ro-Ro vessel
 - bulk carrier
 - ore carrier
 - combination carrier
 - tanker: crude oil carrier, product carrier, chemical carrier, gas carrier
 - special purpose (Lo-Lo, Flo-Flo)
 - support vessels (dredgers, salvage & rescue boats)
 - passenger ship / cruise ship
 - Ro-Pax vessel

(4) TEACHING METHODS--ASSESSMENT

| MODES OF DELIVERY | In class lecturing |
|-----------------------------------|--------------------|
| Face-to-face, in-class lecturing, | |
| distance teaching and distance | |
| learning etc. | |

| USE OF INFORMATION AND COMMUNICATION TECHNOLOGY Use of ICT in teaching, Laboratory Education, Communication with students | Use of ICT in teaching (ppt slides & video) | | |
|---|---|--|--|
| 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. | Activity/Method Lectures | Semester workload 52 hrs 98 hrs 150 hours | |
| 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, otheretc. Specifically defined evaluation criteria are stated, as well as if and where they are accessible by the students. | Written exam | | |

(5) SUGGESTED BIBLIOGRAPHY:

 «Ναυπηγική Οικονομική», Βλάχος Γεώργιος, 2017.
«Μελέτη πλοίου - Μεθοδολογίες προμελέτης: τεύχος 1», Παπανικολάου Απόστολος, 2009.