

COURSE OUTLINE

(1) GENERAL

SCHOOL	School of Engineering		
ACADEMIC UNIT	Department of Naval Architecture		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	NAOE1340	SEMESTER	7 th
COURSE TITLE	SHIP BUILDING TECHNOLOGY		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	CREDITS (ECTS)
Lectures		4	5
COURSE TYPE <i>general background, specialbackground, specialised general knowledge, skills development</i>	Specialized		
PREREQUISITE COURSES:			
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes		
COURSE WEBSITE (URL)	https://eclass.uniwa.gr/courses/NA233/		

(2) COURSE GOALS / LEARNING OUTCOMES

The aim of the course is the familiarization of the students with the basic stages of shipbuilding, starting from the production of the Technical Specifications that must be followed during the construction until the successful completion of the acceptance tests of the ship.

The ultimate goal of the course is to provide the students with all the necessary knowledge to supervise the shipbuilding and to help them to perform the activity of the supervising inspector (site surveyor), either on behalf of the shipowner or on behalf of the Classification Society.

(3) COURSE CONTENT / SYLLABUS

Theory:

- Production of shipbuilding technical specifications
- Construction materials
- Fatigue of constructions
- Preparation of plates
- Preparation of pieces for the construction of frames
- Methods of connecting frames and blocks in slip-ways and dry dock
- Alignment of ship construction
- General issues of quality control of ship production
- Ship equipment

- Ship launching preparation and phases
- Ship acceptance tests.

Exercises are prepared on ship data (construction drawings-test results) that include:

- Checking compliance with agreed technical specifications.
- Calculation of weight of metal construction of frames.
- Calculation of low - high frequency fatigue
- Evaluation of acceptance test results (speed - consumption-vibrations)

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY Face-to-face, Distance learning, etc.	Face-to-face	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, laboratory education, communication with students	<ul style="list-style-type: none"> • Training material is distributed in electronic format. 	
TEACHING METHODS <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>	Activity	Workload (hours)
	Lectures	52
	Team projects	39
	Personal Study	52
	Course total	143
STUDENT PERFORMANCE EVALUATION <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>	Weight of final exams: 60% Weight of exercises: 40%	

(5) ATTACHED BIBLIOGRAPHY

Books

- Lee Storch, Hammon, Bunch & Moore, "Ship production", Cornell Maritime Press, 1995.
- Eyres D.G., Bruce G.J, "Ship Construction", Butterworth-Heinemann, 2012.
- Yamaguchi, Y., "Fatigue Failures in Ship Structures", Journal of the Japan Welding Society, Vol. 37, No. 10, 1965

Indicative Journals

- Journal of Ship Production and Design, SNAME
- Marine Technology, SNAME