| Discipline      | TECHNICAL SAFETY and CONTROL of ENVIRONMENTAL EFFECTS code: 41                                |                   |        |
|-----------------|---|-------------------|--------|
|                 |   | 2nd Semester Thin | d Year |
| Specialty       | NAVAL ARCHITECTURE AND MARINE TECHNOLOGY  |                   |        |
| ECTS credits: 4 | Form of assessment: Continuous assessment   |                   |        |
| Lecturer        | Assoc. prof. Galina Ilieva Room 406M Phone: +359 52 383 524 E-mail: galina.ilieva@tu-varna.bg |                   |        |
| Department      | Department of Naval Architecture, Marine Engineering  |                   |        |
| Faculty         | Faculty of Shipbuilding   |                   |        |

## Learning objectives:

## /ANNOTATION/

The aim of the course is to introduce students to the regulations and requirements for safety in shipbuilding and ship repair industry, knowledge to MARPOL requirements, ways to reduce harmful emissions, approaches to reduce marine litter from shipbuilding and maritime industry, etc.

Special attention is paid to EEDI, EEOI, EEXI, CII and other important indicators and indexes.

## **CONTENTS:**

Standards and principles for technical safety

MARPOL convention and its requirements

Ballast, grey, bilge, black, oily waters treatment

Safety management systems

Personal safety devices

Approaches to reduce harmful emissions from marine machinery and reduce marine litter from ships

Approaches to reduce harmful effects of shipbuilding and ship repair industry

Approaches to achieve energy efficiency in shipbuilding, ship repair and ship's exploitation

Total: 30 lectures and 15 seminar exercises ECTS credits: 4