



## Course syllabus

Faculty of Technology

Kalmar Maritime Academy

1FT56I Stabilitet, 2 högskolepoäng

1FT56I Stability, 2 credits

### **STCW reference**

A-III/2

### **Subject Group**

Other Subjects within Technology

### **Level of classification**

First Level

### **Progression**

G1F

### **Date of Ratification**

Approved by Faculty of Technology 2015-01-13

The course syllabus is valid from autumn semester 2015

### **Prerequisites**

General entry requirements and Mathematics 2a / 2b / 2c, Physics 1b1 / 1a or Mathematics B, Physics A (Field-specific entry requirements 7/A7). Program course Ship Technology 4 credits, or similar.

## Objectives

### *Proficiency and comprehension*

By the end of this course, students will be able to:

- use a damage control plan
- describe stability by means of different approaches

### *Skills and abilities*

By the end of this course, students will be able to:

- implement a heeling test in order to determine the vessel's centre of gravity and displacement

## Content

- TSFS 2009: 114 (selected sections)

- Heeling test
- Rolling Test
- Deterministic calculation of damage stability
- Probabilistic approach
- Added weight
- Lost buoyancy
- Regulation development for damage stability
- Damage control plans

## Type of Instruction

Instruction consists of lectures and graded assignments

## Examination

The course is assessed with the grades Fail (U) or Pass (G).

The expected objectives must be achieved in order to pass the course. In order to receive the grade Pass, the objectives must be met. In order to receive the Pass with distinction grade, a similar grade is required for the written exam.

Knowledge assessment takes place as follows:

- through individually graded writing exercise
- by written examination

## Course Evaluation

Course evaluation is in accordance with the Kalmar Maritime Academy's quality manual.

## Required Reading and Additional Study Material

Van Bokkum, Klaas *Ship Stability*, latest edition.

Transportstyrelsens Författningssamling TSFS 2009:114, including latest updates. MSC.1/Circ. 1245 "Guidelines for damage control plans and information to the master".