Linnæus University

Jnr: 2014/4157-3.1.2

Course syllabus

Faculty of Technology
Kalmar Maritime Academy

1FT54I Driftoptimering och felsökning, 4 högskolepoäng
Operational Efficiency and Troubleshooting, 4 credits

STCW reference
Sektion AIII/1-2011 och Sektion AIII/2-2011

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 B, Physics A or Mathematics 2a / 2b / 2c, Physics 1b1 / 1a (Field-specific entry requirements 7/A7). program course Ship Machinery Management 5 credits, or similar.

Objectives

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

- describe the operational optimization of main and auxiliary engines and other ship systems
- evaluate machinery performance and fix errors on machinery and equipment

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

- at the management level, operationally manage, optimise, troubleshoot and document the ship machinery and related components

Evaluation skills and Approach
By the end of this course, students will be able to:

- analyze and interpret the technical measurements and monitoring values of the vessel and take appropriate measures therewith
- critically analyze and systematically use knowledge of ship machinery in order to predict and evaluate developments whilst taking into account safety of shipping

and maintenance, the environment and economic considerations
- analyze and organize the resources available for the ship's engineering, environmental and maritime safety by means of effective communication, teamwork and group interaction

Content

- operation and troubleshooting of ship machinery
- optimization of the operation of ship machinery and ship equipment
- procedures for ship operation in different sea areas
- procedures for various emergencies
- Ship’s technical operation documentation, and performance testing
- leadership and communication i.e. Engine Room Resource Management (ERM)

Type of Instruction

Instruction consists of lectures and graded exercises

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).
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 simulator-based examination.
Knowledge assessment takes place as follows:

- Assessment is by written report and individually graded simulator-based exercise.

Course Evaluation

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

Required Reading and Additional Study Material

Course material, Kalmar Maritime Academy