



Course syllabus

Faculty of Technology

Kalmar Maritime Academy

1SJ001 Sjötransport som drivkraft för världsekonomin, 7,5
högskolepoäng

Maritime transport, the engine of the global economy, 7.5 credits

Main field of study

Maritime Science

Subject Group

Shipping

Level of classification

First Level

Progression

G1N

Date of Ratification

Approved by Faculty of Technology 2016-11-28

The course syllabus is valid from autumn semester 2017

Prerequisites

NO VALUE DEFINED

Objectives

Knowledge and understanding

After completing the course, students should be able to:

- Describe how a sustainable shipping from a technical perspective will contribute to Blue Growth.
- Explain the main challenges of shipping such as energy consumption, climate influence, health impact and the regulatory framework.
- Review the best practices and initiatives that range from ship design, propulsion systems, weather routing, education and training.
- Describe the relation between sea transport and the global economy.

Competence and skills

After completing the course, students should be able to:

- Describe how knowledge in maritime technology, environmental science and education can form the base for sustainable shipping.
- Show knowledge of rules and regulations within the shipping industry framework.
- Discuss the challenges for a sustainable shipping with authorities, researches and business representatives.

Content

The course includes the following elements.

- Introduction to navigation and ship knowledge
- Ship design and structure
- Cargo handling and different types of cargo
- Propulsion engines and auxiliary systems
- Fuel types and emissions
- Environmental impact of shipping
- Sea transports in relation to the global economy
- Seaborne trade routes, network and transit times
- Development of shipping in a historical perspective
- World merchant fleet, shipping segments and their properties
- The characteristics of sea transport demand and cost of sea transport
- The cost of running ships
- The role of governments, NGOs and other international stakeholders
- The role of ports in the transport system
- International and regional regulations for the design, construction and operation of ships

Type of Instruction

The course consists of tutorials and seminars, independent projects, literature studies and practicals.

Participation in seminars, exercises and the presentations of written projects are mandatory.

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

Examination is normally conducted by oral presentations, written reports, active participation in seminars. During group work the responsibility for the content of the presentation should be divided between the students. In addition, the contribution of each student to the various elements of the presentation should be clearly stated.

Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty and at the Kalmar Maritime Academy.

Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

Required reading

Martin Stopford, *Maritime Economics*, Routledge, Third edition. ISBN: 9780415275583. Approx 800 pages

Klaas van Dokkum, *Ship knowledge*, Dokmar Maritime, latest edition. Approx 300 pages

J Fredrik Lindgren, Selma Brynolf, Magda Wilewska-Bien, Karin Andersson, *Shipping and the environment*, Springer, latest edition. Approx 400 pages.

