

Course guide

280682 - 280682 - Short Sea Shipping

Last modified: 25/10/2023

Unit in charge:	Barcelona School of Nautical Studies	
Teaching unit:	742 - CEN - Department of Nautical Sciences and Engineering.	
Degree:	BACHELOR'S DEGREE IN NAUTICAL SCIENCE AND MARITIME TRANSPORT (Syllabus 2010). (Optional subject).	
Academic year: 2023	ECTS Credits: 6.0	Languages: English

LECTURER

Coordinating lecturer:	RAÚL BADILLO CORRAL
Others:	Segon quadrimestre: RAÚL BADILLO CORRAL - ERAS, GNTM ANDREU MARTÍNEZ PARERA - ERAS, GNTM

PRIOR SKILLS

To have a minimum level of understanding and reading of english.

REQUIREMENTS

To have passed previous subjects related to the Short Sea Shipping subject, like Marine legislation, Maritime economy or Marine english.

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Generical:

3. ABILITY TO IDENTIFY AND SOLVE PROBLEMS IN THE FIELD OF ENGINEERING
4. Capacitat PER CONCEBRE, I MANAGE TO IMPLEMENT SISTEMES Complexos L'ambit of L'ENGINYERIA NÀUTICA I TRANSPORT MARÍTIM

Transversal:

1. EFFECTIVE USE OF INFORMATION RESOURCES - Level 3. Planning and using the information necessary for an academic assignment (a final thesis, for example) based on a critical appraisal of the information resources used.
2. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.

TEACHING METHODOLOGY

Magistral classe will be used to introduce the main topics
Working groups will be organised in order to be the responsible for developing the proposed class work and activities.
The results will be presented in class publicly and discussed among groups.

LEARNING OBJECTIVES OF THE SUBJECT

The objective of the subject is to provide the student with an overall view of the short distance marien transport in Europe mainly. This knowledge will be enriched with information of different type of ships, freights, volumes exchanged and the sustainability of the marine transport in itself.

STUDY LOAD

Type	Hours	Percentage
Hours medium group	15,0	10.00
Self study	90,0	60.00
Guided activities	5,0	3.33
Hours large group	30,0	20.00
Hours small group	10,0	6.67

Total learning time: 150 h

CONTENTS

Chapter 1: Introduction

Description:

Chapter 1: Introduction

Specific objectives:

Generalities on transport policy in Europe, will be presented and related regulations on customs and different procedures carried out in the transport chains.

Related activities:

Up to 5 different activities would be proposed, mainly related with the reading and an abstract presentation to be discussed in class; of several documents proposed by the teacher.

Related competencies :

07 AAT N3. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.

06 URI N3. EFFECTIVE USE OF INFORMATION RESOURCES - Level 3. Planning and using the information necessary for an academic assignment (a final thesis, for example) based on a critical appraisal of the information resources used.

Full-or-part-time: 8h

Theory classes: 8h

Chapter 2: The coastwise transport system

Description:

Chapter 2: The coastwise transport system

Specific objectives:

The three different pillars of the coastwise transport system will be dealt with.

Freight regarding volumes and traffics in Europe, will be commented.

Traffics regarding commercial exchanging areas will be viewed.

Different type of ships will be analysed, mainly related with SSS traffics

Related activities:

Up to 5 different documents related with typologies of ships and cargoes moved in Spain - Europe.

First exercises will be carried out regarding the time and costs, of different transport chains alternatives.

Full-or-part-time: 12h

Theory classes: 12h

Chapter 3: The port system

Description:

Chapter 3: The port system

Specific objectives:

The port system will be analysed in Europe.

The different type of ports, main ports in terms of volume and cargo type.

Flows between ports also will be also analysed.

Also Port CDM software will be introduced.

Related activities:

Up to 2 documents will be discussed and publicly defended abstracts on them.

Different exercises will be carried out, regarding the viability of establishing a transport chain between two ports.

Full-or-part-time: 25h

Theory classes: 25h

Chapter 4: The sustainability of the SSS

Description:

Chapter 4: The sustainability of the SSS

Specific objectives:

The main objective is to discuss the environment performance of the Marine transport, its regulations and operational consequences. And them related to the road transport

Related activities:

Several documents will be analysed and the abstracts derived, will be discussed in class.

Exercises related to the environemtnal performance of ships will be carried out, using models like CORINAIR, INFRASS or mOPSEA, inter alia.

Full-or-part-time: 12h

Theory classes: 12h

Chapter 5: The high speed crafts

Description:

Chapter 5: The high speed crafts.

Specific objectives:

The incidence and application of such kind of ships, will be analysed, regarding the time of service due their speed but also their economic and environmental costs and fuel consumption.

Related activities:

One activity will be designed in order to compare the time performance of such kind of ships.

Full-or-part-time: 3h

Theory classes: 3h

(ENG) -

GRADING SYSTEM

Multi choice questionnaires: 10%

Proposed exercises: 20%

In class proposed exercises: 20%

Final exam to be developed: 50%

Final exam for all who have not passed during the course. However only reserved for the ones that have delivered all the scheduled activities.

Re evaluation exam for all the students that have not passed the subject and based on the general conditions established in the normative.

EXAMINATION RULES.

The work in groups, should be developed by all of the members in the group, and will be asked to be demonstrated.

For all the students that should go to the final exam, they will need to deliver all the course activities, before do the exam.

BIBLIOGRAPHY

Basic:

- Montori Díez, Agustín; Escribano Muñoz, Carlos; Martínez Marín, Jesús. Manual del transporte marítimo. Barcelona: Marge books, 2015. ISBN 9788415340317.

- Musso, E. [et al.]. Gestión portuaria y tráfico marítimos. A Coruña: Netbiblo, 2004. ISBN 8497450787.

- Olivella, Joan. [et al.]. Las autopistas del mar como alternativa al paso de los Pirineos. Barcelona: UPC, 2006. ISBN 847653874X.

- Martínez de Osés, F. Xavier; Castells, Marcel·la. Análisis de la aplicación del ecobono en los tráfico marítimos españoles : una propuesta basada en los costes externos generados. Barcelona: Barcelona digital, SL, 2009. ISBN 9788476532669.

- Martínez de Osés, F. Xavier; Castells Sanabra, M. "Heavy weather in european short sea shipping: its influence on selected routes". The journal of navigation [on line]. Jan. 2008, vol. 61, núm. 1, p. 165-176 [Consultation: 11/10/2018]. Available on: <http://journals.cambridge.org/action/displayJournal?jid=NAV>.

- Martínez de Osés, F.X.; Castells Sanabra, M. "The external cost of speed at sea: an analysis based on selected short sea shipping routes". WMU Journal of Maritime Affairs [on line]. April 2009, vol. 8, núm. 1, p. 27-45 [Consultation: 01/09/2022]. Available on: <https://www-springer-com.recursos.biblioteca.upc.edu/journal/13437>.

- Castells i Sanabra, M.; Usabiaga Santamaría, J.J.; Martínez de Osés, F.X. "Manoeuvring and hotelling external costs: enough for alternative energy sources?". Maritime Policy and management [on line]. [Consultation: 24/07/2017]. Available on: <http://upcommons.upc.edu/handle/2117/27075>.

Complementary:

- Lind, Mikael; Michaelides, Michalis; Ward, Robert; Watson, Richard T. Maritime Informatics [on line]. Berlin: Springer, 2021 [Consultation: 26/04/2021]. Available on: <https://ebookcentral.proquest.com/lib/upcatalunya-ebooks/detail.action?docID=6397449>. ISBN 9783030508920.

RESOURCES

Hyperlink:

- www.eurostat.eu

- <http://upcommons.upc.edu>