		Guía D	ocente			
Datos Identificativos				2022/23		
Asignatura (*)	Economía do Transporte			Código	730542014	
Titulación	Master Universitario Erasmus Mundus en Sostibilidade e Industria 4.0 aplicada ao Sector Mari				r Marítimo	
		Descri	ptores			
Ciclo	Período	Cu	rso	Tipo	Créditos	
Mestrado Oficial	2º cuadrimestre	Prim	neiro	Obrigatoria	3	
Idioma	Inglés					
Modalidade docente	Presencial					
Prerrequisitos						
Departamento	Enxeñaría Naval e Industrial					
Coordinación	Munín Doce, Alicia Correo electrónico a.munin@udc.es			S		
Profesorado	Munín Doce, Alicia		Correo electrónico	a.munin@udc.es		
Web	http://www.master-seas40.unina.it					
Descrición xeral	The objective of this course is to p	provide the stu	dents the insights of h	ow ships are used	to earn money. In order to do so,	
	the functioning of the maritime markets needs to be understood. Also, it is the aim to explain that ships are part of a larger					
	logistics chain and that the interaction in the port and with the other transport modes is vital. Next to that, also the working					
	principals of a port are explained even as hinterland transport. Finally, the current developments regarding emission					
	reductions in the total transport chain are dealt with.					

	Competencias / Resultados do título
Código	Competencias / Resultados do título
A6	CE6 - Demonstrate knowledge, understanding and competences in fulfilling safety, economic and sustainability requirements in ship
	operation and management (SO).
B2	CB6 - Acquire and understand knowledge that provides a basis or opportunity to be original in the development and / or application of
	ideas, usually in a research context.
В3	CB7 - That students know how to apply the acquired knowledge and their ability to solve problems in new or unfamiliar environments
	within broader (or multidisciplinary) contexts related to their area of study.
B4	CB8 - That students are able to integrate knowledge and face the complexity of making judgments based on information that, being
	incomplete or limited, includes reflections on the social and ethical responsibilities linked to the application of their knowledge and
	judgments.
B5	CB9 ? That students are able to communicate their conclusions -and the knowledge and ultimate reasons that sustain them- to specialized
	and non-specialized publics in a clear and unambiguous way.
B6	CB10 - That students have the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous
B7	CG1 ? To display the adequate intercultural competence to successfully navigating within multicultural learning environments and to
	implement basic management principles suitable for a multicultural working environment.
В8	CG2 ? To express an attitude of intellectual inquisitiveness and open-mindedness.
B12	CG6 ? To appreciate the impact of sustainable development goals in maritime transport.
C2	CT2 - Mastering oral and written expression in a foreign language.
C4	CT4 - Acting as a respectful citizen according to democratic cultures and human rights and with a gender perspective.
C5	CT5 - Understanding the importance of entrepreneurial culture and the useful means for enterprising people.
C6	CT6 - Acquiring skills for healthy lifestyles, and healthy habits and routines.
C7	CT7 -Developing the ability to work in interdisciplinary or transdisciplinary teams in order to offer proposals that can contribute to a
	sustainable environmental, economic, political and social development.
C8	CT8 -Valuing the importance of research, innovation and technological development for the socioeconomic and cultural progress of
	society.

Resultados da aprendizaxe	
Resultados de aprendizaxe	Competencias /
	Resultados do título

Capability to understand how the maritime sector is structured, how it is part of a more complex logistic system and how ships	AM6	BM1	CM2
and ports are integrated within it.		BM2	CM4
		ВМ3	CM5
		BM4	CM6
		BM5	CM7
		BM6	CM8
		BM7	
		BM11	

Contidos				
Temas	Subtemas			
Lesson 1	Main introduction lesson where the global maritime transport chain is explained. This			
	chain will include, maritime part of the transport, ports and the hinterland transport.			
	The main objective here is to show that a ship is part of a bigger transport chain. A			
	model (which has been developed by me) can also be offered to the students to make			
	some calculations. This could be part of the paper/ assignment.			
Lesson 2	Maritime lecture part 1: Economic organization of the shipping market. This will be a			
	based on Stopford (2006)			
Lesson 3	Maritime lecture part 2: Sub-markets & Down in shipping. Also this lecture will			
	be based on Stopford (2006)			
Lesson 4	Port lecture part 1: The organization of ports. What are ports, how do they function			
Lesson 5	Port lecture part 2: The organization of ports. What are ports, how do they function,			
	and what is the interaction with ships (bunkerings and provision of alternative fuels).			
Lesson 6	Hinterland lecture part 1: Port hinterland transport. In this lecture is explained how			
	cargo being shipped from ports to the hinterland and which transport modes can be			
	used (road, rail, IWT).			
Lesson 7	Hinterland lecture part 2: Modal choice, intermodal transport and hinterland			
	infrastructure.			
Lesson 8	Emission mitigation in maritime transport chains and the impact it has on both			
	shippers and vessel owners.			
	This course can include: A short introduction in the propulsion system of a vessel,			
	Investments in new (retofitable) technologies in deepsea vessels due to legislation,			
	Impact of the Environmental Efficiency Design Index (EEDI) of deepsea vessels on			
	CO2 emissions, Impact of the Emission Control Area at the North Sea on port			
	competition, Impact of the internalization of external cost on port competition.			

	Planificacio	ón		
Metodoloxías / probas	Competencias /	Horas lectivas	Horas traballo	Horas totais
	Resultados	(presenciais e	autónomo	
		virtuais)		
Sesión maxistral	A6 B4 B6 B7 B12 C4	18	18	36
	C5 C6			
Traballos tutelados	B3 B5 B8 C2 C7 C8	4	26	30
Proba mixta	B2	2	2	4
Atención personalizada		5	0	5

Metodoloxías		
Metodoloxías	Descrición	

Sesión maxistral	Oral presentation complemented with the use of audiovisual media and the introduction of some questions aimed at students,
	in order to transmit knowledge and facilitate learning
Traballos tutelados	Supervised learning process aimed at helping students to work independently in a range of contexts (academic and
	professional). Focused primarily on learning ?how to do things? and on encouraging students to become responsible for their
	own learning.
Proba mixta	Written test used for the assessment of learning, whose distinctive feature is the ability to determine whether or not the
	answers given are correct. It is a rigorously developed measuring instrument that allows to assess knowledge, abilities, skills,
	performance, aptitudes, attitudes, etc.

Atención personalizada				
Metodoloxías	Descrición			
Sesión maxistral	Students will be able to solve their doubts through personalized tutorials. To contact the teaching staff, they may use email or			
Traballos tutelados	Teams.			

Avaliación			
Metodoloxías	Competencias /	Descrición	Cualificación
	Resultados		
Traballos tutelados	B3 B5 B8 C2 C7 C8	Group coursework: a research paper on a given topic for which a model can be given	40
		to the students to make use of	
Proba mixta	B2	The evaluation of the subject will be carried out through an exam where the	60
		knowledge acquired by the student during the course will be assessed.	

## Observacións avaliación

General EMJMD Sustainable Ship and Shipping SEAS 4.0 evaluation rules:

- Students will have only two oportunities to pass a course. If failing to do so, they may be forced to leave the degree.
- No part time or lecture attendance exemption are allowed in this degree.

Fontes de información



## Bibliografía básica

- Stopford (2006). Maritime economics 3 edition.
- Aronietis Raimonds, Sys Christa, van Hassel Edwin, Vanelslander Thierry (2017). Investigating the bunkering choice determinants: the case of the port of Antwerp. Journal of shipping and trade
- Aronietis Raimonds, Sys Christa, van Hassel Edwin, Vanelslander Thierry (2016). Forecasting port-level demand for LNG as a ship fuel: the case of the port of Antwerp. Journal of shipping and trade
- van Hassel Edwin, Meersman Hilde, Van de Voorde Eddy, Vanelslander Thierry (2016). Impact of scale increase of container ships on the generalised chain cost. Maritime policy and management
- van Hassel Edwin, Meersman Hilde, Van de Voorde Eddy, Vanelslander Thierry (2016). North-South container port competition in Europe: the effect of changing environmental policy. Research in transportation business & the effect of changing environmental policy. Research in transportation business amp;
- Stevens Laurence, Sys Christa, Vanelslander Thierry, van Hassel Edwin (2015). Research in transportation business & the same; management.
- van Hassel Edwin (2017). The implementation and evaluation of the energy efficiency design index (EEDI): the future emission mitigation of three main shipping segments: C/WP6(2017)9. Paris. Organisation for Economic Co-operation and Development
- van Hassel Edwin, Vanelslander Thierry, Neyens Kris, Vandeborre Hans, Kindt Dominique, Kellens Stefa (2021). Reconsidering nearshoring to avoid global crisis impacts: application and calculation of the total cost of ownership for specific scenarios. Research in transportation economics
- van Hassel Edwin, Meersman Hilde, Van de Voorde Eddy, Vanelslander Thierry (2020). Impact of investing in new port capacity from a shipper and a shipowner perspective: the case of maasvlakte II. In Case studies on transport policy
- Oganesian Virzhiniia, van Hassel Edwin, Sys Christa, Vanelslander Thierry (2020). Container barge (un)reliability in seaports: a company case study at the port of Antwerp. International journal of shipping and transport logistics
- Meersman Hilde, Sutalo Nicolas, Van de Voorde Eddy, van Hassel Edwin, Vanelslander Thierry (2020). Belt and road: more competition between sea and rail? A generalized cost approach in Freight transport modeling in emerging countries. Kourounioti, Ioanna
- Mohseni Seyed Abolfazl, van Hassel Edwin, Sys Christa, Vanelslander Thierry (2019). Economic evaluation of alternative technologies to mitigate sulphur emissions in maritime container transport from both the vessel owner and shipper perspective. In Journal of Shipping and Trade

Bibliografía complementaria

## Recomendacións

Materias que se recomenda ter cursado previamente

Materias que se recomenda cursar simultaneamente

Materias que continúan o temario

## Observacións

To help in achieving a sustainable environment and to get the objective of number 5 action of the "Ferrol Green Campus Action Plan" (Healthy and environmentaly and socially sustainable research and teaching): The assignments to be done in this course: Will be required in digital format. Will be delivered using Moodle, with no need to print them. In case it is necessary to print them: Plastics won't be used. Two side printing will be used. Recycled paper will be used. Printing drafts will be avoided. A sustainable use of the resources should be done, together with the prevention of negative impacts on the environment. Anbsp;

(\*)A Guía docente é o documento onde se visualiza a proposta académica da UDC. Este documento é público e non se pode modificar, salvo casos excepcionais baixo a revisión do órgano competente dacordo coa normativa vixente que establece o proceso de elaboración de guías