

DEREE COLLEGE SYLLABUS FOR: MG 4087 SHORT SEA SHIPPING	
(Updated Fall 2021)	UK LEVEL: 6 UK CREDITS: 15 US CREDITS: 3/0/3
PREREQUISITES:	None
CATALOG DESCRIPTION:	Characteristics of short sea shipping, and fundamental concepts regarding its internal and external environment. Ship types and major trade routes. Comparison with land-based transport, policy background, regulations affecting short sea shipping and economic factors associated with Motorways of the Sea.
RATIONALE:	<p>Short sea shipping involves the waterborne transport of goods and passengers, without crossing an ocean. Being in direct competition with land-based means of transport, it aims to improve the interconnections among ports and achieve sustainable mobility.</p> <p>The importance of short sea shipping has been increasing all over the world. This mode of transport has gained a prominent role in Europe as it is consistent with EU's broad transport policies while it is particularly vital for Greece due to its long coastline and numerous islands.</p> <p>The course provides a solid foundation of short sea shipping and its interrelation with environmental, economic, and political factors. The material enables students to understand and follow current issues in this field.</p>
LEARNING OUTCOMES:	<p>As a result of taking this course, the student should be able to:</p> <ol style="list-style-type: none"> 1. Identify and explain the key elements and functions of short sea shipping and analyse its challenges. 2. Identify the distinctive characteristics of short sea shipping in different parts of the world and assess its sustainable development and prospects. 3. Identify and combine the relevant regulations, policies, and practices in specific maritime nations and examine their impact on short sea services.
METHOD OF TEACHING AND LEARNING:	<p>In congruence with the teaching and learning strategy of the college, the following tools are used:</p> <ul style="list-style-type: none"> ➤ Classes consist of lectures, discussions, collaborative in-class small projects, experiential exercises and discussion of actual cases by the course instructor as well as guest speakers specialists in their respective practice area. ➤ Office Hours: Students are encouraged to make full use of the office hours of their instructor in order to consult and discuss issues related to the course's content.

	<p>➤ Use of Blackboard: The instructor will post lecture notes, additional teaching material and readings, as well as assignments instructions and announcements.</p>						
<p>ASSESSMENT:</p>	<p>Summative:</p> <table border="1" data-bbox="649 378 1393 510"> <tr> <td>First Assessment: Written project (Individual; 2,300 - 2,700 words)</td> <td>60%</td> </tr> <tr> <td>Final Assessment: Final examination (Essay-type questions)</td> <td>40%</td> </tr> </table> <p>Formative:</p> <table border="1" data-bbox="649 571 1393 669"> <tr> <td>Coursework (Case studies and experiential exercises; Written project presented during class)</td> <td>0%</td> </tr> </table> <p>The formative coursework aims to prepare students for the written project and the final examination.</p> <p>The written project tests Learning Outcome 1. The final examination tests Learning Outcomes 2 and 3.</p> <p>Students are required to resit failed assessments in this module.</p>	First Assessment: Written project (Individual; 2,300 - 2,700 words)	60%	Final Assessment: Final examination (Essay-type questions)	40%	Coursework (Case studies and experiential exercises; Written project presented during class)	0%
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Final Assessment: Final examination (Essay-type questions)	40%						
Coursework (Case studies and experiential exercises; Written project presented during class)	0%						
<p>INDICATIVE READING:</p>	<p>REQUIRED READING:</p> <p>Papadimitriou, S., Lyridis, D.V., Koliouis, I., Tsioumas, V., Sdoukopoulos, E., Stavroulakis, P.J. (2018). <i>The Dynamics of Short Sea Shipping. New Practices and Trends</i>. Palgrave Macmillan</p> <p>RECOMMENDED READING:</p> <p>Akbar, A., Aasen, A. K., Msakni, M. K., Fagerholt, K., Lindstad, E., & Meisel, F. (2021). An economic analysis of introducing autonomous ships in a short-sea liner shipping network. <i>International Transactions in Operational Research</i>, 28(4), 1740-1764.</p> <p>Arof, A. M. (2018). Decision making model for Ro-Ro short sea shipping operations in Archipelagic Southeast Asia. <i>The Asian Journal of Shipping and Logistics</i>, 34(1), 33-42.</p> <p>Douet, M., & Cappuccilli, J. F. (2011). A review of short sea shipping policy in the European Union. <i>Journal of Transport Geography</i>, 19(4), 968-976.</p> <p>Fafaliou, I., Lekakou, M., & Theotokas, I. (2006). Is the European shipping industry aware of corporate social responsibility? The case of the Greek-owned short sea shipping companies. <i>Marine Policy</i>, 30(4), 412-419.</p> <p>Frost, J. D., & Brooks, M. R. (2017). Short sea shipping and ferries. In <i>The Routledge Handbook of Transport Economics</i> (pp. 323-347). Routledge.</p>						

	<p>Johnson, H., Johansson, M., & Andersson, K. (2014). Barriers to improving energy efficiency in short sea shipping: an action research case study. <i>Journal of Cleaner Production</i>, 66, 317-327.</p> <p>Johnson, H., & Styhre, L. (2015). Increased energy efficiency in short sea shipping through decreased time in port. <i>Transportation Research Part A: Policy and Practice</i>, 71, 167-178.</p> <p>Kapros, S., & Panou, C. (2007). Coastal shipping and intermodality in Greece: The weak link. <i>Research in Transportation Economics</i>, 21, 323-342.</p> <p>Kooij, C., Loonstijn, M., Hekkenberg, R. G., & Visser, K. (2018). Towards autonomous shipping: Operational challenges of unmanned short sea cargo vessels. In <i>Marine Design XIII</i> (pp. 871-880). Taylor & Francis Group Espoo.</p> <p>Lupi, M., Pratelli, A., Falleni, M., & Farina, A. (2019). An Analysis of Short Sea Shipping Container Routes in the Mediterranean and in the Black Sea.</p> <p>Perakis, A. N., & Denisis, A. (2008). A survey of short sea shipping and its prospects in the USA. <i>Maritime Policy & Management</i>, 35(6), 591-614.</p> <p>Psarafitis, H. N., & Zis, T. (2019). European Policies for Short Sea Shipping and Intermodality. In <i>Short Sea Shipping in the Age of Sustainable Development and Information Technology</i>.</p> <p>Puckett, S. M., Hensher, D. A., Brooks, M. R., & Trifts, V. (2011). Preferences for alternative short sea shipping opportunities. <i>Transportation research part E: Logistics and transportation review</i>, 47(2), 182-189.</p> <p>Raza, Z., Svanberg, M., & Wiegman, B. (2020). Modal shift from road haulage to short sea shipping: a systematic literature review and research directions. <i>Transport Reviews</i>, 40(3), 382-406.</p> <p>Santos, T. A., & Guedes Soares, C. (2017). Methodology for ro-ro ship and fleet sizing with application to short sea shipping. <i>Maritime Policy & Management</i>, 44(7), 859-881.</p> <p>Spoof-Tuomi, K., & Niemi, S. (2020). Environmental and economic evaluation of fuel choices for short sea shipping. <i>Clean Technologies</i>, 2(1), 34-52.</p> <p>Suárez-Alemán, A. (2016). Short sea shipping in today's Europe: A critical review of maritime transport policy. <i>Maritime Economics & Logistics</i>, 18(3), 331-351.</p>
<p>INDICATIVE MATERIAL: (e.g. audiovisual, digital material, etc.)</p>	<p>REQUIRED MATERIAL: N/A</p> <p>RECOMMENDED MATERIAL: N/A</p>

COMMUNICATION REQUIREMENTS:	Use of appropriate academic conventions as applicable in oral and written communications.
SOFTWARE REQUIREMENTS:	Microsoft Office: Word, Excel
WWW RESOURCES:	http://shipowners.ca/short.html http://www.shortsea.gr/en/ http://www.shortsea.info/ http://www.imdo.ie/imdo/shortsea http://www.props-sss.eu/ http://www.clarksons.com/services/broking/shortsea/ http://www.lngholland.com/en/ http://ec.europa.eu/transport/modes/maritime/short_sea_shipping/ http://www.cslships.com/en/our-values/our-environment/short-sea-shipping http://www.opdr.com/en/ http://www.shortsea.org.tr/eng/index.php
INDICATIVE CONTENT:	<ol style="list-style-type: none"> 1. Introduction to short sea shipping 2. Advantages and disadvantages of short sea shipping 3. Economic factors 4. Ship types and fleets 5. Fuels for short sea shipping and sustainability 6. The cargoes and transshipment traffic 7. Motorways of the sea and related EU policies 8. Regulatory framework 9. The prospects for potential short sea operations in the US 10. Coastal Shipping and Intermodality in Greece 11. Major short sea shipping corridors 12. Selected case studies