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<tr><td colspan="2">DEREE COLLEGE SYLLABUS FOR: US CREDITS: 3/0/3</td></tr>
<tr><td colspan="2">MG 4087 SHORT SEA SHIPPING – LEVEL 6<br>UK CREDITS: 15<br>(Updated Fall 2021)</td></tr>
<tr><td>PREREQUISITES:</td><td>None</td></tr>
<tr><td>CATALOG DESCRIPTION:</td><td>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.</td></tr>
<tr><td>RATIONALE:</td><td>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.<br>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.<br>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.</td></tr>
<tr><td>LEARNING OUTCOMES:</td><td>As a result of taking this course, the student should be able to:<br><br>1. Identify and explain the key elements and functions of short sea shipping and analyse its challenges.<br>2. Identify the distinctive characteristics of short sea shipping in different parts of the world and assess its sustainable development and prospects.<br>3. Identify and combine the relevant regulations, policies, and practices in specific maritime nations and examine their impact on short sea services.</td></tr>
<tr><td>METHOD OF TEACHING AND LEARNING:</td><td>In congruence with the teaching and learning strategy of the college, the following tools are used:<br>• 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.<br>• 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.<br>• Use of Blackboard: The instructor will post lecture notes, additional teaching material and readings, as well as assignments instructions and announcements.</td></tr>
<tr><td>ASSESSMENT:</td><td>Summative:<br><table><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><br>Formative:</td></tr>
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| | Coursework (Case studies and experiential exercises; Written project presented during class) — **0%**<br><br>The formative coursework aims to prepare students for the written project and the final examination.<br>The written project tests Learning Outcome 1.<br>The final examination tests Learning Outcomes 2 and 3. |
| **INDICATIVE READING:** | **REQUIRED READING:**<br><br>Papadimitriou, S., Lyridis, D.V., Koliousis, I., Tsioumas, V., Sdoukopoulos, E., Stavroulakis, P.J. (2018). *The Dynamics of Short Sea Shipping. New Practices and Trends*. Palgrave Macmillan<br><br>**RECOMMENDED READING:**<br><br>• 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. *International Transactions in Operational Research*, *28*(4), 1740-1764.<br>• Arof, A. M. (2018). Decision making model for Ro-Ro short sea shipping operations in Archipelagic Southeast Asia. *The Asian Journal of Shipping and Logistics*, *34*(1), 33-42.<br>• Douet, M., & Cappuccilli, J. F. (2011). A review of short sea shipping policy in the European Union. *Journal of Transport Geography, 19(4),* 968-976.<br>• 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. *Marine Policy*, *30*(4), 412-419.<br>• Frost, J. D., & Brooks, M. R. (2017). Short sea shipping and ferries. In *The Routledge Handbook of Transport Economics* (pp. 323-347). Routledge.<br>• Johnson, H., Johansson, M., & Andersson, K. (2014). Barriers to improving energy efficiency in short sea shipping: an action research case study. *Journal of Cleaner Production*, *66*, 317-327.<br>• Johnson, H., & Styhre, L. (2015). Increased energy efficiency in short sea shipping through decreased time in port. *Transportation Research Part A: Policy and Practice*, *71*, 167-178.<br>• Kapros, S., & Panou, C. (2007). Coastal shipping and intermodality in Greece: The weak link. *Research in Transportation Economics, 21,* 323-342.<br>• Kooij, C., Loonstijn, M., Hekkenberg, R. G., & Visser, K. (2018). Towards autonomous shipping: Operational challenges of unmanned short sea cargo vessels. In *Marine Design XIII* (pp. 871-880). Taylor & Francis Group Espoo.<br>• 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.<br>• Perakis, A. N., & Denisis, A. (2008). A survey of short sea shipping and its prospects in the USA. *Maritime Policy & Management, 35(6),* 591-614.<br>• Psaraftis, H. N., & Zis, T. (2019). European Policies for Short Sea Shipping and Intermodality. In *Short Sea Shipping in the Age of Sustainable Development and Information Technology*.<br>• Puckett, S. M., Hensher, D. A., Brooks, M. R., & Trifts, V. (2011). Preferences for alternative short sea shipping opportunities. *Transportation research part E: Logistics and transportation review*, *47*(2), 182-189. |

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| | • Raza, Z., Svanberg, M., & Wiegmans, B. (2020). Modal shift from road haulage to short sea shipping: a systematic literature review and research directions. *Transport Reviews*, *40*(3), 382-406.<br>• Santos, T. A., & Guedes Soares, C. (2017). Methodology for ro-ro ship and fleet sizing with application to short sea shipping. *Maritime Policy & Management*, *44*(7), 859-881.<br>• Spoof-Tuomi, K., & Niemi, S. (2020). Environmental and economic evaluation of fuel choices for short sea shipping. *Clean Technologies*, *2*(1), 34-52.<br>• Suárez-Alemán, A. (2016). Short sea shipping in today's Europe: A critical review of maritime transport policy. *Maritime Economics & Logistics*, *18*(3), 331-351. |
| **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<br>http://www.shortsea.gr/en/<br>http://www.shortsea.info/<br>http://www.imdo.ie/imdo/shortsea<br>http://www.props-sss.eu/<br>http://www.clarksons.com/services/broking/shortsea/<br>http://www.lngholland.com/en/<br>http://ec.europa.eu/transport/modes/maritime/short_sea_shipping/<br>http://www.cslships.com/en/our-values/our-environment/short-sea-shipping<br>http://www.opdr.com/en/<br>http://www.shortsea.org.tr/eng/index.php |
| **INDICATIVE CONTENT:** | 1. Introduction to short sea shipping<br>2. Advantages and disadvantages of short sea shipping<br>3. Economic factors<br>4. Ship types and fleets<br>5. Fuels for short sea shipping and sustainability<br>6. The cargoes and transhipment traffic<br>7. Motorways of the sea and related EU policies<br>8. Regulatory framework<br>9. The prospects for potential short sea operations in the US<br>10. Coastal Shipping and Intermodality in Greece<br>11. Major short sea shipping corridors<br>12. Selected case studies |