

<b>DEREE COLLEGE SYLLABUS FOR: MG 2061 SHIP OPERATIONS AND TECHNICAL MANAGEMENT</b>									
(Updated Fall 2021)	<b>UK LEVEL: 4</b> <b>UK CREDITS: 15</b> <b>US CREDITS: 3/0/3</b>								
<b>PREREQUISITES:</b>	None								
<b>CATALOG DESCRIPTION:</b>	The ship as the production unit of a shipping firm. Principal ship types and corresponding cargoes, ship's equipment and machinery, ship and cargo operations, technical aspects of ship management.								
<b>RATIONALE:</b>	A variety of features and elements of ships and cargoes impact vessels' operations and technical maintenance. This course examines the principal characteristics of ships and introduces the basic day-to-day operations and technical aspects of ship management. It also provides an understanding on how these operations affect the decision making of the shipping company.								
<b>LEARNING OUTCOMES:</b>	As a result of taking this course, the student should be able to: <ol style="list-style-type: none"> <li>1. Classify the different types of ships and cargoes and define their main characteristics.</li> <li>2. Outline the technical management aspects of the vessel and discuss how they influence its operation.</li> <li>3. Identify the critical factors associated with ship operations and discuss the challenges they pose to the management of maritime shipping companies in the context of recent sustainability trends.</li> </ol>								
<b>METHOD OF TEACHING AND LEARNING:</b>	In congruence with the teaching and learning strategy of the college, the following tools are used: <ul style="list-style-type: none"> <li>➤ Lectures, slide presentations, the carrying out of a written project, in-class discussions and student team presentations.</li> <li>➤ 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. Also, students may contact the instructor via e-mail for any questions relevant to the lectures.</li> <li>➤ Use of Blackboard: The instructor will post lecture notes, additional teaching material and readings, as well as assignments instructions and announcements.</li> </ul>								
<b>ASSESSMENT:</b>	<p><b>Summative:</b></p> <table border="1" style="width: 100%;"> <tr> <td>First Assessment: Written Project (1.000-1.200 words)</td> <td style="text-align: center;"><b>40%</b></td> </tr> <tr> <td>Final Assessment: Final Examination (Essay-type questions)</td> <td style="text-align: center;"><b>60%</b></td> </tr> </table> <p><b>Formative:</b></p> <table border="1" style="width: 100%;"> <tr> <td>Mock exam</td> <td style="text-align: center;"><b>0%</b></td> </tr> <tr> <td>Teamwork presentations</td> <td style="text-align: center;"><b>0%</b></td> </tr> </table>	First Assessment: Written Project (1.000-1.200 words)	<b>40%</b>	Final Assessment: Final Examination (Essay-type questions)	<b>60%</b>	Mock exam	<b>0%</b>	Teamwork presentations	<b>0%</b>
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Mock exam	<b>0%</b>								
Teamwork presentations	<b>0%</b>								

	<p>The formative “Mock Exam” aims to prepare students for the final examination. “Teamwork Presentations” aim to help students assimilate taught material and effectively communicate key course concepts.</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>
<p><b>INDICATIVE READING:</b></p>	<p><b>REQUIRED READING:</b></p> <p>Driffin, N. (2014). SHIPPING: An Introduction to the Technical, Operational and Commercial Aspects (1<sup>st</sup> ed.). England: Petrosport Limited.</p> <p><b>RECOMMENDED READING:</b></p> <p>Allianz Global Corporate &amp; Specialty SE. (2020). 10 Coronavirus Challenges for the Shipping Sector. AGCS.</p> <p>Branch, A. &amp; Robarts, M. (2014). Branch's Elements of Shipping (9th ed.). London and New York: Routledge.</p> <p>Brodie, P. (2014). Commercial Shipping Handbook (3rd ed.). Informa Law.</p> <p>Dickie, J. (2014). Reeds 21<sup>st</sup> Century Ship Management. London: Bloomsbury.</p> <p>DNV-GL. (2018). Maritime Forecast to 2050, Energy Transition Outlook 2018.</p> <p>Eyres, D. &amp; Bruce, G. (2012). Ship Construction (7<sup>th</sup> ed.). Butterworth-Heinemann.</p> <p>House, D.J. (2014). Seamanship Techniques: Shipboard and Marine Operations (4th ed.). Routledge.</p> <p>Institute of Chartered Shipbrokers. (2017 ed.). Ship Operations and Management, Witherby &amp; Co. Ltd.</p> <p>International Maritime Organization. (2020). SOLAS Consolidated Edition 2020, IMO.</p> <p>Stopford M. (2020), Coronavirus, Climate Change &amp; Smart Shipping Three Maritime Scenarios 2020 – 2050, Seatrade Maritime, Informa Markets.</p> <p>Stopford, M. (2009). Maritime Economics. (3rd Ed.). London and New York: Routledge.</p> <p>Theotokas, I. (2018). Management of Shipping Companies. London and New York: Routledge.</p> <p>United Nations Conference on Trade and Development. (2020). Review of Maritime Transport 2020, UNCTAD.</p> <p>United Nations Conference on Trade and Development. (2018). 50 Years of Review of Maritime Transport 1968-2018: Reflecting the past,</p>

	<p>Exploring the Future, UNCTAD.</p> <p>Visvikis, I.D. &amp; Panayides, P.M. (Eds.). (2017). Shipping Operations Management. Springer.</p> <p>Wijnolst, N. &amp; Wergeland, T. (2009). Shipping Innovation. Amsterdam: IOS Press.</p>
<b>INDICATIVE MATERIAL:</b> (e.g. audiovisual, digital material, etc.)	<p><b>REQUIRED MATERIAL:</b> N/A</p> <p><b>RECOMMENDED MATERIAL:</b> N/A</p>
<b>COMMUNICATION REQUIREMENTS:</b>	Use of appropriate academic conventions as applicable in oral and written communications.
<b>SOFTWARE REQUIREMENTS:</b>	Microsoft PowerPoint: for in-class presentation of teamwork (formative). Microsoft Word: for written project.
<b>WWW RESOURCES:</b>	<p>www.bimco.org  www.cdi.org.uk  www.iacs.org  www.intercargo.org  www.intertanko.com  www.ics-shipping.org  www.imca-int.com  www.imo.org  www.ipta.org.uk  www.shipsupply.org  www.ocimf.org  www.rightship.com  www.ship-technology.com  www.sigtto.org  www.ihsmaritime360.com  www.hellenicshippingnews.com  www.lloydslist.com  www.maritimejournal.com  www.seatrade-global.com  www.nridigital.com/ship-technology-archive  www.tradewindsnews.com</p>
<b>INDICATIVE CONTENT:</b>	<ol style="list-style-type: none"> <li>1. Ship types and cargoes</li> <li>2. The Ship <ul style="list-style-type: none"> <li>- Measurements</li> <li>- Design and evolution</li> <li>- Organization</li> <li>- Manning</li> <li>- Communication and digital systems</li> <li>- Propulsion</li> <li>- Handling Equipment</li> <li>- Safety</li> </ul> </li> <li>3. Ship Operations <ul style="list-style-type: none"> <li>- Port Operations</li> <li>- Mooring</li> <li>- Cargo Operations</li> <li>- Navigation</li> <li>- Voyage Planning</li> <li>- Bunkering</li> </ul> </li> <li>4. Ship Technical Management <ul style="list-style-type: none"> <li>- Maintenance</li> </ul> </li> </ol>

- Repair
- Dry-docking
- Shipbuilding
- Efficiency / Performance / Sustainability
- Surveys and Vetting

5. Maritime Companies

- Types
- Ship Management
- Holding
- Ship Owning
- Brokerage (S&P – Chartering)
- Agencies
- Functions / Duties
- Departments / Organization

6. Ship Expenses and Costs