

DEREE COLLEGE SYLLABUS FOR: EC 3227 MARITIME ECONOMICS

UK LEVEL: L5
UK CREDITS: 15
US CREDITS: 3/0/3

(Updated Fall 2021)

PREREQUISITES:

EC 1000 Principles of Microeconomics
 MA 1008 College Algebra

CATALOG DESCRIPTION:

The economics of sea transport and related markets. Shipping & ship demand & supply, economies of scale, shipping cycles, ship & shipyard productivity, shipyard subsidisation, return on shipping investment, evolution of fleet costs as more ships are activated, shipping risk & FFAs, bulk carriers vs. specialised ships, marginal cost pricing, fast vs. slow steaming.

RATIONALE:

The course aims at helping students understand the application of economic principles & concepts on the transportation of goods by sea, the determination of freight rates, and the interaction of shipping markets (including shipbuilding). As such, it constitutes an important course in the shipping management programme, providing the necessary groundwork for other courses in shipping, enhancing the employability of programme (as well as economics) graduates in the field.

LEARNING OUTCOMES:

- As a result of taking this course students should be able to:
1. Analyse and explain shipping markets and cycles; freight rate indices; ship productivity; economies of scale in shipping; marginal cost pricing in shipping.
 2. Define and analyse sea transport demand & supply and the distribution of shipping risk between shipowner & cargo owner.
 3. Explain the trade-off between fast & slow steaming, and apply this on shipowner's profit-maximisation problem.
 4. Calculate and analyse the Return on Shipping Investment.
 5. Define, discuss and explain shipbuilding demand & supply and shipyard productivity.

METHOD OF TEACHING AND LEARNING:

- In congruence with the learning and teaching strategy of the college, the following tools are used:
- Classes consist of lectures and class discussions of recent articles in economic journals assigned by the instructor.
 - Office hours: students are encouraged to make full use of the office hours of their instructor, where they can ask questions and go over lecture material.
 - Use of blackboard, where instructors post lecture notes, assignment instructions, timely announcements, as well as additional resources.

ASSESSMENT:

Summative:	
1 st assessment: In-class examination (One-hour, closed book, problems/essays/multiple choice/true-false combination)	40%

	<table border="1" data-bbox="521 205 1312 342"> <tr> <td data-bbox="521 205 1123 342">Final assessment: In-class examination (Two-hour, closed book, problems/essays/multiple choice/true-false combination)</td> <td data-bbox="1123 205 1312 342">60%</td> </tr> </table> <p data-bbox="521 380 672 407">Formative:</p> <table border="1" data-bbox="521 411 1312 447"> <tr> <td data-bbox="521 411 1123 447">Formative assignments</td> <td data-bbox="1123 411 1312 447">0%</td> </tr> </table> <p data-bbox="521 485 1507 548">The formative assignments prepare students for summative assignments and ensure that students are actively engaged during the term.</p> <p data-bbox="521 583 1203 646">The 1st assessment tests Learning Outcomes 1, 2, 3. The final assessment tests Learning Outcomes 4, 5.</p> <p data-bbox="521 684 1507 747">The final grade for this module will not be determined through grade averaging. Students are required to resit any failed assessments.</p>	Final assessment: In-class examination (Two-hour, closed book, problems/essays/multiple choice/true-false combination)	60%	Formative assignments	0%
Final assessment: In-class examination (Two-hour, closed book, problems/essays/multiple choice/true-false combination)	60%				
Formative assignments	0%				
<p data-bbox="142 814 464 842">INDICATIVE READING:</p>	<p data-bbox="521 831 829 858">REQUIRED READING:</p> <p data-bbox="521 884 1479 947">Stopford, M. (2008): <i>Maritime Economics</i>. Routledge, latest edition. ISBN-10: 041527558X ISBN-13: 978-0415275583</p> <p data-bbox="521 1014 1385 1077">Journal articles, accessible through the Library, as assigned by the instructor.</p> <p data-bbox="521 1129 911 1157">RECOMMENDED READING:</p> <p data-bbox="521 1199 1474 1329"><u>The Economist (2018):</u> "Sulphur-emissions rules for shipping will worsen global warming - The IMO's rules could also wipe 3% off America's GDP", Oct. 27th. https://www.economist.com/business/2018/10/27/sulphur-emissions-rules-for-shipping-will-worsen-global-warming</p> <p data-bbox="521 1367 1401 1465"><u>EY (2017):</u> <u>Repositioning Greece as a global maritime capital.</u></p> <p data-bbox="521 1503 1482 1566">Friedman, D. (1990): <i>Price Theory: An intermediate text</i>, pp. 402-8, South-Western Publishing Co.</p> <p data-bbox="521 1604 1507 1766">Fuentes, P. & Couvillion, W. (2004): "The Economics of Increasing Speed in Sea Transportation: The Case for the Southern US, Mexico, Central America and the Caribbean". http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.607.604&rep=rep1&type=pdf</p> <p data-bbox="521 1770 1474 1833">Jansson, J.O. & Shneerson, D. (1982): "The optimal ship size", <i>Journal of Transport Economics and Policy</i>, v. 16, n. 3, pp. 217-38.</p>				

	<p>Kasimati, E. & Veraros, N. (2017): "Is there accuracy of forward freight agreements in forecasting future freight rates? An empirical investigation", Bank of Greece working paper 230, June 3.</p> <p>Meyer, J., Stahlbock, R., Voß, S. (2012): "Slow steaming in Container Shipping", 45th Hawaii Int'l Conference on System Sciences. https://www.researchgate.net/publication/254051395_Slow_Steaming_in_Container_Shipping</p> <p>Psaraftis, H.N. & Kontovas, C.A. (2014): "Ship speed optimization: Concepts, models and combined speed-routing scenarios", Transportation Research. PartC: Emerging Technologies, 44, 52-69. https://doi.org/10.1016/j.trc.2014.03.001</p> <p>Rodrigue, J.P. (2015): "The Disadvantages of Scale in Maritime Shipping". https://www.porteconomics.eu/2015/06/11/1065/</p> <p>Ronen, D. (2011): "The effect of oil price on containership speed and fleet size", Journal of the Operational Research Society 2, 211-6.</p> <p>Smith, H. (2012): "Greece's super-rich maintain lavish lifestyles and low profiles", The Guardian, 13 June. http://www.theguardian.com/world/greek-election-blog-2012/2012/jun/13/greeces-super-rich-low-profiles</p> <p><u>Olympic Vessels (2019): "Freight Derivatives Explained", 15 Oct. http://www.olympicvessels.com/derivatives.php</u></p> <p><u>Theotokas, I. (2007): "On top of world shipping: Greek shipping companies' organization and management", <i>Research in Transportation Economics</i>, v. 21, pp. 63-93.</u></p>
<p>INDICATIVE MATERIAL: (e.g. audiovisual, digital material, etc.)</p>	<p>REQUIRED MATERIAL: N/A</p> <p>RECOMMENDED MATERIAL: N/A</p>
<p>COMMUNICATION REQUIREMENTS:</p>	<p>Use of appropriate academic conventions as applicable in oral and written communications.</p>
<p>SOFTWARE REQUIREMENTS:</p>	<p>Word, Excel</p>
<p>WWW RESOURCES:</p>	<p>http://www.ship.gr/ https://www.ics.org.uk/ http://www.imo.org/en/Pages/Default.aspx https://www.ugs.gr/en/ https://www.clarksons.com/services/research/ https://www.balticexchange.com/</p>

INDICATIVE CONTENT:

1. Introduction to shipping
2. Revolutionary changes in the international shipping industry since 1850
3. Shipping market cycles
4. The 4 shipping markets
5. Kinds of shipping contracts
6. Unit-costs, ship productivity, quantity of sea transport supplied
7. The parcel size distribution function
8. Economies of scale in shipping
9. Supply, demand and freight rates
10. Distribution of shipping risk between cargo owner and ship owner, and FFAs
11. Trade-off the shipowner faces between fast & slow steaming, and the effect of ship speed on profit
12. Return on shipping investment
13. Evolution of fleet costs (MC, AC) as more ships are activated
14. Bulk ship vs specialised ship
15. Shipyard supply & demand, and shipyard productivity. Incidence of a subsidy
16. Marginal cost pricing and competition in the shipping industry