Course Title	Shipping Risk Management					
Course Code	SOM 008					
Course Type	Lectures					
Level	Postgraduate					
Year / Semester	1 <sup>st</sup> / 2 <sup>nd</sup>					
Teacher's Name	Prof. Ilias D. Visvikis					
ECTS	10	Lecture hour (total)	ſS	10 hours	Laboratory hours (total)	6 hours
Course Purpose and Objectives	The aim of this course is to provide an in-depth understanding in risk management and derivatives products in shipping. Risk management is constantly evolving and has become an essential tool within the modern corporation. The cyclical and volatile nature of the shipping business that tends to result in extensive fluctuations in rates and prices associated with shipping operations makes risk management crucially important to shipping companies. As a result, shipping derivatives have been developed in order to more efficiently manage risks, emanating from fluctuations in freight rates, bunker prices, vessel prices, interest rates and foreign exchange rates, amongst others. The module's main aim is to provide a critical understanding on how all main types of shipping derivatives can be applied in the day-to-day practice of risk management in shipping					
Learning Outcomes	<ul> <li>After taking this course students will be able to understand:</li> <li>How risk can affect cash flows from operating activities in shipping</li> <li>Describe the risk-return trade-offs and evaluate the sources of business risks in shipping</li> <li>How to analyze and measure the impact of financial risks in shipping operations and investments</li> <li>Evaluate all available derivatives products and markets as well as the various underlying assets</li> <li>Implement different hedging strategies with the use of derivatives products in shipping</li> <li>Manage shipping related risk exposures</li> <li>Develop, appraise and implement shipping related risk management strategies</li> <li>Price shipping derivatives and estimate optimal hedge ratios</li> <li>Apply advanced option trading strategies in shipping</li> </ul>					
Prerequisites	Shipping Finance		Requi	red	None	
Course Content	Introduction to Shipping Risk Management - Sources of business risks in shipping - Financial risk in shipping - Traditional hedging methods - Introduction to derivative instruments					

	<ul> <li>Freight Rate Risk Management</li> <li>Freight market information</li> <li>Underlying freight assets</li> <li>Forward Freight Agreements (FFA) trading</li> <li>Freight Futures</li> <li>Clearing and Clearing Houses</li> <li>Documentation and settlement</li> <li>Electronic trading</li> <li>FFA and hedging examples for spot, time-charter &amp; tanker routes</li> </ul>			
	Freight Rate Options - Option terminology - Using freight options for hedging - Option trading strategies - Freight options pricing			
	<ul> <li>Bunker Risk Management</li> <li>Importance of bunker risk management in shipping</li> <li>Use of bunker derivatives</li> <li>Forward bunker contracts: hedging and trading</li> <li>Options on bunker prices</li> </ul>			
	Financial Risk Management in Shipping <ul> <li>Interest rate risk</li> <li>Hedging interest rate risk using forwards and futures</li> <li>Interest rate caps, floors and collars</li> <li>Currency risk</li> <li>Foreign exchange futures and swaps</li> </ul>			
	<ul> <li>Ship Price Risk Management <ul> <li>Portfolio theory</li> <li>Diversification and risk-return optimisation</li> <li>Baltic Sale &amp; Purchase Assessment (BSPA)</li> <li>Baltic Demolition Assessment (BDA)</li> <li>Sale &amp; Purchase Forward Agreements (SPFA)</li> </ul> </li> </ul>			
Teaching Methodology	<ul> <li>Audiovisual lectures</li> <li>Exercises</li> <li>Assignments</li> <li>Extensive readings of the international literature</li> <li>Live sessions</li> </ul>			
Bibliography	<ul> <li>Kavussanos, M., Visvikis, I. and Tsouknidis, D. (2019), Derivatives and Risk Management in Shipping, 2<sup>nd</sup> Edition, Forthcoming, UK.</li> <li>Kavussanos, M. and Visvikis, I (2011): Theory and Practice of Shipping Freight Derivatives, Risk Books, Incisive Media, UK.</li> <li>Visvikis, I and Panayides, P. (2017): Shipping Operations Management, WMU Studies in Maritime Affairs Book Series, Springer, Germany.</li> </ul>			

	• Kavussanos, M. and Visvikis, I (2016): The International Handbook of Shipping Finance: Theory and Practice, Palgrave Macmillan UK.				
	• Kavussanos, M. and Visvikis, I. (2006), Derivatives and Risk Management				
	in Shipping, 1 <sup>st</sup> Edition, Witherbys Publishing and Seamanship				
	International, UK.				
Assessment	2 Assignments 30%				
7.000001110111	Final Examination 70%				
Language	• English				