Course Title	Shipping Ma	Shipping Management				
Course Code	IM683	IM683				
Course Type	Major Electiv	Major Elective				
Level	BSc/1st Cycle	BSc/1st Cycle				
Year / Semester	4 TH /8 TH	4 TH /8 TH				
Teacher's Name	Giannis Chatz	Giannis Chatzis				
ECTS	7.5	Lectures / week	3 hours	Laboratories / week	-	
Course Purpose and Objectives	management,	This course introduces the framework and practices on various aspects of ship management, and marketing management for the shipping firm. The tools for financial analysis of shipping investments are also introduced.				
Learning Outcomes	Upon completion of the course, students should be able to understand the functions and activities of different aspects of ship management. They shall learn the concepts, functions and strategies of marketing for the shipping firm. Students shall also learn the financial analysis tools in making shipping investments.					
Prerequisites		Requ	ired	-		
Course Content	 2 Third-party 3 Technical 4 Managing 5 Discounted 6 Capital bud 7 Marketing: 8 Marketing 9 Promotion 10 Publicity; s 	 2 Third-party ship management firms 3 Technical management 4 Managing ship's husbandry 5 Discounted cash flow analysis 6 Capital budgeting and the weighted average cost of capital 7 Marketing: basic concepts 8 Marketing strategic planning; market definition 				
Teaching Methodology	Lectures.					
Bibliography		Essential Reading Willingale, Malcolm (2005) Ship Management, 4th ed., LLP Ltd				
Assessment	Assignments, Final Exam					
Language	English	English				

Course Title	Introduction to Oil and Gas					
Course Code	MOG571					
Course Type	Major Elective					
Level	BSc/1st Cycle					
Year / Semester	2 nd /4 th					
Teacher's Name	Zacharias Petrou					
ECTS	7.5	Lectures / week	3 hours	Laboratories / week		
Course Purpose and Objectives	The main objectives of the course are to:					
	Introduce the students to petroleum technology and its importance to society					
	Familiarize students with a range of terminology used in petroleum engineering					
	• Familiarize students with the fundamental concepts of petroleum engineering namely petroleum geology, reservoir engineering, drilling and production methods and resource evaluation					
	Describe how wells are drilled and fluids extracted to the surface					
	• Discuss how production strategies can be designed to optimize recovery					
	Discuss oil economics and distribution systems					
	Introduce students to laboratory experiments and simulation tools					
Learning	After completion of the course students will be able to:					
Outcomes	• Demonstrate the competencies and skills acquired to function as a petroleum engineer					
	Describe the principle phases of the petroleum engineering function					
	• Understand the structure and composition of the Earth and its impact on the development of petroleum systems					
	• Describe the latest techniques of exploration, drilling, reservoir engineering, production and refinery operations					
	• Be familiar with the principle types of subsurface geology, how data can be extracted and how they can be used to estimate hydrocarbon volumes					
	• Discuss how reservoir fluids and gasses flow in the subsurface and how recovery can be optimized					
	• Discuss petroleum production statistics, products and markets, oil economics, supply systems and product applications.					
	Describe the	e unconventional so	urces of oil a	nd gas recourses		

	• Describe the chemical synthesis of oil, natural gas, biofuels, alternative fuels					
Prerequisites	Required					
Course Content	The nature of gas and oil					
	• The Earth's crust - where we find it					
	 Identification of common rocks and minerals 					
	 Deformation of sedimentary rocks 					
	 Ocean environment and plate tectonics 					
	Sedimentary rock distribution					
	Mapping					
	Source rocks, generation, migration, and accumulation of petroleum					
	Reservoir rocks					
	Petroleum traps					
	 Petroleum exploration – geological, geochemical and geophysical Drilling a well - the mechanics 					
	Drilling problems and techniquesTesting and completing a well					
	Surface treatment and storage					
	Offshore					
	Workover					
	Reservoir mechanics					
	Petroleum productionReserves					
	Improved oil recovery					
	 Unconventional oil and gas 					
	Laboratory: a) Introduction to Instrumental Methods of Analysis b) Hyphanated analytical instrumentation c) Demonstrations d) Software simulation					
Teaching Methodology	Lectures, in-class examples, exercises, Laboratory practical sessions					
Bibliography	Norman J. Hyne Nontechnical Guide to Petroleum Geology, Exploration, Drilling, and Production Penn Well 2012 978-1-59370- 269-4					
	Joseph Hilyard The Oil & Gas Industry: A Nontechnical Guide PennWell 2012 978-1-59370- 254-0					
Assessment	Final Exams 60% Assignment/labs 40%					

Language	English