

Course unit title:	Oil & Gas Geology and Reservoir Characterization		
Course unit code:	OG200		
Type of course unit:	Compulsory		
Level of course unit:	B.Sc		
Year of study:	2 nd		
Semester when the unit is delivered:	4 th Semester		
Number of ECTS credits allocated :	5		
Name of tentative lecturer(s):	Dr. Chatzichristos Christos		
Learning outcomes of the course unit:	<ol style="list-style-type: none"> 1. Know the fundamentals about the rocks containing hydrocarbons 2. Know about the hydrocarbons formation and migration 3. Know about Oil & Gas offshore and Onshore exploration 4. Know about the Estimation and Classification of reserves 		
Mode of delivery:	Face-to-face		
Prerequisites:	None	Co-requisites:	None
Recommended optional program components:			
Course contents:	<ol style="list-style-type: none"> 1. Geology of Hydrocarbons <ul style="list-style-type: none"> • Sediments and Sedimentary rocks • Depositional Environment • Aspects of Structural Geology • H/C formation, migration and entrapment 2. Hydrocarbon Exploration <ul style="list-style-type: none"> • Geological Surveys • Seismic Exploration • Gravitational Methods • Exploratory Wells • Logging 3. Hydrocarbon Reserves <ul style="list-style-type: none"> • H/C reserves estimation • H/C reserves Classification 4. Field development and Recovery methods <ul style="list-style-type: none"> • Field development planning • Primary recovery methods • Secondary recovery methods • Enhanced oil Recovery 		
Recommended and/or required reading:	Petroleum Engineering Handbook, by L.W.Lake, SPE, 2007.		
Textbooks:	1. Fundamentals of Reservoir Engineering (Developments in Petroleum Science), by L.P. DAKE, Elsevier, 1 st edition 1978, last edition 2010.		
Software:			
References:	Petroleum Production Systems, by Michael Economides, Daniel Hill, Christine Ehlig-Economides, Prentice Hall petroleum Engineering Series, 1994.		
Planned learning activities and teaching methods:	<p>The taught part of course is delivered to the students by means of lectures and video presentations, conducted with the help of computer. Lecture notes and presentations will be available through the web for students to use in combination with the textbooks.</p> <p>Lectures will be supplemented by homework assignments and readings.</p>		
Assessment methods and criteria:	<ul style="list-style-type: none"> • Assignments 25% • Mid-Term Exam: 25% • Final Exam 60% 		
Language of	English		

instruction:	
Work placement(s):	No