



# UNIVERSITY OF NICOSIA

## ΠΑΝΕΠΙΣΤΗΜΙΟ ΛΕΥΚΩΣΙΑΣ

University of Nicosia, Cyprus

<b>Course Code</b> OGEN-425	<b>Course Title</b> Oil and Gas Technologies	<b>ECTS Credits</b> 6
<b>Department</b> Management & MIS	<b>Semester</b> Fall / Spring	<b>Prerequisites</b> None
<b>Type of Course</b> Major Elective	<b>Field</b> Energy, Oil and Gas Management	<b>Language of Instruction</b> English
<b>Level of Course</b> Undergraduate	<b>Year of Study</b> 4 <sup>th</sup>	<b>Lecturer(s)</b> Dr Costas Knis
<b>Mode of Delivery</b> face-to-face	<b>Work Placement</b> N/A	<b>Co-requisites</b> None

### **Objectives of the Course:**

- To provide a broad understanding of the essential principles of petroleum exploration
- To provide the student with a comprehensive understanding on the various components of surface and subsea petroleum production facilities
- To help students develop an understanding of the principles of the designing and construction of pipelines

### **Learning Outcomes:**

On completion of this module, students are expected to be able to:

1. Understand the essential principles of petroleum exploration.
2. Comprehend the design, construction, operation and maintenance of wells.
3. Critically assess major problems faced in drilling wells
4. Gain sufficient knowledge on the design, construction, maintenance, safety and security of on-shore and off-shore pipelines
5. Understand the different distribution systems in the field of oil and gas exploration and production

### **Course Content:**

- 1/ Petroleum Exploration
- 2/ Drilling a Well and Problems
- 3/ Completing and Testing a Well

- 4/ Surface Treatment and Storage
- 5/ Offshore Drilling and Production
- 6/ Reservoir Mechanics
- 7/ Petroleum Production
- 8/ Reserves and Improved Oil Recovery
- 9/ Designing and Construction of Pipelines
- 10/ Maintenance, Safety and Security of Pipelines
- 11/ Total Distribution Systems

**Teaching Methods:**

Lectures, In-class exercises, In-class discussions and homework

**Assessment Methods:**

Assignments, mid-term exam, final exam

**Required Textbooks:**

<b>Authors</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>	<b>ISBN</b>
Martin Raymond and William L. Leffler	<i>Oil and Gas Production in Non-Technical Language</i>		2005	
Thomas O. Miesner and William L Leffler	<i>Oil and Gas Pipelines in Nontechnical Language</i>		2006	