



Course Code OGAS-425	Course Title Intro to Petroleum Engineering	ECTS Credits 6
Department School of Business	Semester Fall	Prerequisites None
Type of Course Major Elective	Field Energy, Oil and Gas Management	Language of Instruction English
Level of Course Undergraduate	Year of Study 4 th	Lecturer(s) Dr Costas Konis
Mode of Delivery face-to-face	Work Placement N/A	Co-requisites 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:

Authors	Title	Publisher	Year	ISBN
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	