University of Nicosia, Cyprus

Course Code	**Course Title**	**ECTS Credits**
OGEE-420	Natural Gas Production Engineering	6
Department	**Semester**	**Prerequisites**
Engineering	Fall, Spring	OGEE-360
Type of Course	**Field**	**Language of Instruction**
Required	Oil & Gas Engineering	English
Level of Course	**Year of Study**	**Lecturer(s)**
1st Cycle	4th	Prof Ioannis Bakouros
Mode of Delivery	**Work Placement**	**Co-requisite**
Face-to-face	N/A	None

Objectives of the Course:

The main objectives of the course are to:

- Introduce natural gas and its properties
- Acquaint students with the material balance as well as flow analysis in pipes
- Investigate holistically natural gas production system performance
- Introduce natural gas compression and metering

Learning Outcomes:

After completion of the course students are expected to be able to:

- Familiarize themselves with natural gas and its properties
- Investigate natural gas behavior using the material balance analysis
- Analyse in flow performance and examine natural gas flow in pipes with restrictions
- Evaluate integrated system performance
- Examine natural gas compression and metering

Course Contents:

- Introduction and properties of Natural Gas
- Material balance and flow analysis
- System performance
- Gas compression and metering

Learning Activities and Teaching Methods:

Lectures, in-class examples, exercises, discussion

Assessment Methods:

Homework, projects, tests, final exam.

Required Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Mohan Kelkar	Natural Gas Production Engineering	PennWell Corp.	2008	9781593700171

Recommended Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Donald La Verne Katz	Natural Gas Engineering: Production and Storage	McGraw-Hill Companies	1990	978-0070333529