



# UNIVERSITY OF NICOSIA ΠΑΝΕΠΙΣΤΗΜΙΟ ΛΕΥΚΩΣΙΑΣ

University of Nicosia, Cyprus

<b>Course Code</b> OGEE-360	<b>Course Title</b> Production Engineering	<b>ECTS Credits</b> 8
<b>Department</b> Engineering	<b>Semester</b> Fall, Spring	<b>Prerequisites</b> OGEE-320, OGEE-330
<b>Type of Course</b> Required	<b>Field</b> Oil & Gas Engineering	<b>Language of Instruction</b> English
<b>Level of Course</b> 1 <sup>st</sup> Cycle	<b>Year of Study</b> 3 <sup>rd</sup>	<b>Lecturer(s)</b> Prof Ioannis Bakouros
<b>Mode of Delivery</b> Face-to-face	<b>Work Placement</b> N/A	<b>Co-requisite</b> None

### Objectives of the Course:

The main objectives of the course are to:

- Introduce the petroleum production systems and their components
- Analyse the various production techniques from reservoirs and wells
- Formulate the Wellbore flow performance
- Provide the framework for system deliverability and production forecast

### Learning Outcomes:

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

- Identify the various components of a petroleum production system
- Compare and contrast the various production techniques
- Recite mathematical models for analyzing flow problems and Apply Wellbore flow performance analysis
- Use a computer software to appraise the production of petroleum systems

### Course Contents:

- Introduction to Petroleum production
- Production from reservoirs and wells
- Near-Wellborn condition and Wellborn flow performance analysis
- Forecast of well production
- Well equipment design and selection
- System deliverability
- Lift methods and analysis

### Learning Activities and Teaching Methods:

Lectures, in-class examples, discussion, laboratory assignments

### Assessment Methods:

Homework, projects, tests, final exam, lab reports

**Required Textbooks/Reading:**

<b>Authors</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>	<b>ISBN</b>
M. Economides, A. D. Hill, C. Ehlig-Economides, D. Zhu	Petroleum Production Systems	Prentice Hall	2012	978-0137031580

**Recommended Textbooks/Reading:**

<b>Authors</b>	<b>Title</b>	<b>Publisher</b>	<b>Year</b>	<b>ISBN</b>
Boyun Guo, William C. Lyons, Ali Ghalambor	Petroleum Production Engineering: A Computer-Assisted Approach	Gulf Professional Publishing	2007	978-0750682701