



Course Code OGEE-360	Course Title Production Engineering	ECTS Credits 8
Department Engineering	Semester Fall, Spring	Prerequisites OGEE-320, OGEE-330
Type of Course Required	Field Oil & Gas Engineering	Language of Instruction English
Level of Course 1 st Cycle	Year of Study 3 rd	Lecturer(s) Prof Ioannis Bakouros
Mode of Delivery Face-to-face	Work Placement N/A	Co-requisite 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:

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

Recommended Textbooks/Reading:

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