

## **Faculty of Engineering & Technology**

## Offshore Petroleum Technology

## Information:

Course Code: PE 506 Level Undergraduate **Course Hours:** 3.00- Hours

Department: Department of Petroleum Engineering

### Instructor Information:

| Title              | Name  | Office hours |
|--------------------|---|--------------|
| Lecturer           | Mohsen Gad Elkarim Elnoby Mohamed           | 6            |
| Teaching Assistant | Abdelrahman Adel Abdullah Abdelghany Kandil |              |

## Area Of Study:

ADevelop studentsoknowledge about Offshore Platforms, offshore leasing, drilling, well completions, production facilities, pipelines, and servicing.

Arain students to demonstrate factors that influence selection of platforms for field development projects

ADevelop students skills to understand Separation Process.

## **Description:**

**Course outcomes:** 

An introduction to the development of oil and gas fields offshore, including offshore leasing, drilling, well completions, production facilities, pipelines, and servicing. Subsea systems, and deepwater developments are also included.

# a. Knowledge and Understanding: : List Platform types based on what the platform is selected. Recognize the difference between manned and unmanned platform. Illustrate offshore production Facility. 4 -Explain Separation process. b.Intellectual Skills:: 1 -Choose criteria to select a suitable Platform. 2 -Select separation vessel shape and types. 3 -Apply control platforms with different method. c.Professional and Practical Skills::

- 1 -Make control on surface and subsurface through platform.
- 2 -Differentiate practically among Platform types.
- 3 -Practice on how to operate production storage process.

#### d.General and Transferable Skills::

1 -Work coherently and successfully as a part of a team in projects



- 2 Make a successful report clearly on well performance.
- 3 Develop the report writing skill and presentation skills.

| Course Topic And Contents :                                       |              |         |                      |
|---|--------------|---------|----------------------|
| Topic   | No. of hours | Lecture | Tutorial / Practical |
| Introduction to the development of oil and gas fields offshore    | 6            | 3       | 3                    |
| Platform types  | 12           | 9       | 3                    |
| Offshore leasing  | 14           | 8       | 6                    |
| Well completions, production facilities Pipelines, and servicing. | 12           | 9       | 3                    |
| Subsea Production Systems   | 9            | 3       | 12                   |
| Separation Process  | 7            | 4       | 3                    |
| Separator application   | 6            | 3       | 3                    |

# **Teaching And Learning Methodologies:**

Interactive Lecturing

Discussion

Problem solving

**Experiential Learning** 

| Course Assessment :       |                   |         |             |  |  |  |
|---------------------------|-------------------|---------|-------------|--|--|--|
| Methods of assessment     | Relative weight % | Week No | Assess What |  |  |  |
| Assignment and attendance | 20.00             |         |             |  |  |  |
| Final exam                | 40.00             |         |             |  |  |  |
| Mid-Term exam I           | 30.00             |         |             |  |  |  |
| Report                    | 10.00             |         |             |  |  |  |

## **Course Notes:**

List of references:

- 1. Classroom Lectures and Assignments.
- 2. Companies manual "Pico and Petrogulf".