

## 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            |
| Lecturer           | Mostafa Magdy El Sayed Abd El Hafiz           |              |
| Teaching Assistant | Taha Abdelhamid Abdelmaqsoud Abdelhamid Yehia |              |

#### Area Of Study :

- Develop students knowledge about Offshore Platforms, offshore leasing, drilling, well completions, production facilities, pipelines, and servicing.
- Train students to demonstrate factors that influence selection of platforms for field development projects
- Develop students skills to understand Separation Process.

#### Description :

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.

#### Course outcomes :

##### a. Knowledge and Understanding: :

|     |  |
|-----|--|
| 1 - | List Platform types based on what the platform is selected.    |
| 2 - | Recognize the difference between manned and unmanned platform. |
| 3 - | 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".