

Faculty of Engineering & Technology

Graduation Project

Information:

Course Code: PE 507 Level: Undergraduate Course Hours: 3.00- Hours

Department: Department of Petroleum Engineering

<u>Instructor Information:</u>

| Title | Name | Office hours |
|----------|-----------------------------------|--------------|
| Lecturer | Mohsen Gad Elkarim Elnoby Mohamed | |

Area Of Study:

A-To familiarize with the industrial field data and how to use it in the Oil and gas field development.

B-Be able to select the appropriate petroleum engineering technique to evaluate and predict the future performance of the oil and gas field.

C- Use the engineering science in solving particular issues and problems in the oil and gas industry.

Description:

An engineering assignment requiring the student to demonstrate initiative and assume responsibility, Students can propose their own project, A project report is required at the end of the tenth semester

Course outcomes:

a.Knowledge and Understanding: :

- 1 Describe the use of petroleum engineering science to develop Oil or Gas field.
- 2 Describe the role of different petroleum engineering disciplines in evaluation of Oil or Gas field.
- 3 Differentiate between types and uses of different geological maps

b.Intellectual Skills::

- 1 Select appropriate solutions for engineering problems based on analytical thinking and data collection.
 - 2 Design a complete Drilling prognosis for a proposed well.
- 3 Analyise the Petrophysical Logs.
- 4 Calculate the Oil in place using Different methods
- 5 Construct the required Geological maps
- 6 Propose an appropriate development plan
- 7 Estimating the development plan feasibility and economics

c.Professional and Practical Skills: :

- 1 Apply knowledge of mathematics, science, information technology, design, business context and engineering practice integrally to create proper project design.
- 2 Professionally merge the engineering knowledge, understanding, collected data and feedback to make the integration of project design.



| 3 - | Apply Practical Knowledge in final presentations. |
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| d.General a | ind Transferable Skills: : |
| 1 - | Ability to work in a team. |
| 2 - | Ability to share ideas and communicate with others |
| 3 - | Ability to deal with others according to the rules of professional ethics. |

| Course Topic And Contents : | | | |
|---------------------------------------|--------------|---------|----------------------|
| Topic | No. of hours | Lecture | Tutorial / Practical |
| Data Introduction and Familiarization | 9 | 0 | 9 |
| Geological Mapping requirements | 9 | 0 | 9 |
| Petrophysical Logging Analysis | 9 | 0 | 9 |
| Drilling Engineering Requirements | 9 | 0 | 9 |
| Reservoir Engineering Requirements | 9 | 0 | 9 |
| Production Engineering Requirements | 9 | 0 | 9 |
| Report Writing | 9 | 0 | 9 |
| Presentation Skills | 9 | 0 | 9 |

Teaching And Learning Methodologies : Class Discussion Tutorials Research

| Course Assessment : | | | |
|---|-------------------|---------|-------------|
| Methods of assessment | Relative weight % | Week No | Assess What |
| Final Presentation and report | 50.00 | | |
| Project preparation and weekly discussion with the project supervisor | 50.00 | | |

with the project supervisor Recommended books: All Petroleum Engineering References delivered previously by FUE.

| Periodicals: | |
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| Onepetro | |
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| Web Sites : | |
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| www.spe.org | |