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INTRODUCTION TO OIL & GAS INDUSTRY AND SUSTAINABLE DEVELOPMENT (LECTURE NOTES)

CREATED BY: MOHMAD SHAUFI SOKIMAN



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BIOGRAPHY OF AUTHOR

Mohd Shaufi Sokiman is a highly qualified professional with a strong background in the field of Petroleum Geology. He holds an MSc in Petroleum Geology from The Universiti Malaya Malaysia and a BSc (Hons) in Marine Science from Universiti Malaysia Terengganu. With over 10 years of experience in teaching and supervising final year projects and Exploration and Production for Petroleum Geoscience students, he is well-suited to provide guidance and mentorship to students in this field. His research focus is on Hydrocarbon Exploration, making him an expert in this area. As a professional geologist registered with Board of Geologist (BOG), he has conducted and involved with various fieldwork for the undergraduates and consultancy job with clients from oil and gas and mining companies. He is also an active committee and member with the Geological Society of Malaysia (GSM), Institute Geology of Malaysia (IGM) and Board of Geologist (BOG).

Siti Nur Fathiyah Jamaludin holds PhD and MSc in Petroleum Geoscience from Universiti Teknologi PETRONAS and BSc in Applied Geology from Curtin University of Technology, Australia. She has 9 years' experience in the academic as a lecturer and researcher and 3 years' experience as a Processing Geophysicist. Fathiyah is also the advisor for American Association of Petroleum Geologists-Student Chapter in UTP, as well as Council Member for the Geological Society of Malaysia (GSM).

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PREFACE

Physical Geology course is compulsory subject for all students enroll in Bachelor of Science (Honours) in Petroleum Geoscience. It is taught for first-year undergraduate students of Universiti Teknologi PETRONAS (UTP). This 4 ECTS (approximately 3 credit hours) course aspire to introduce students to the geological processes involved on the Earth's, particularly on the Earth's surface. It is a fundamental subject for all geology/geoscience students. Before involvement of Erasmus+ MARE in this subject, the emphasis on the depositional environment of coastal and delta environments have been part of the syllabus. It was taught for the purpose of geological process and importance for reservoir characteristics. During the involvement with Erasmus+ MARE in this subject, a modification about 25-30% has been made on the topics for coastal environment, where a new teaching material has been developed for hazard in the coastal area. This is taught under the main topic of geohazard.

LIST OF THE TLM AVAILABLE:

The course is delivered online during Year 2021 and mixed mode from Year 2022-2023, via two methods, i.e. self-learning with video presentations, and guided learning by course lecturers.

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(a) List of Lecture Note

Formation of Marine, Coastal and Delta Environment Formations and Its Significance to Human Life

- Coastal morphology
- Coastal Geohazard
- Type of hazard
- How to mitigate coastal hazards

(b) Video / MOOC

1. [Physical Geology Coastal Erosion Hazard](#) (Recorded by Author)



2. [Shoreline Geology](#) (source YouTube)
3. [Ocean Waves and Shoreline](#) (source YouTube)
4. [Coastal Protection and Structures](#) (source YouTube)
5. [Methods to reduce coastal erosion](#) (source YouTube)

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