

Identification	Subject	PETE 202 Introduction to Petroleum Engineering 6 ECTS
	Department	Petroleum Engineering
	Program	Undergraduate
	Term	Autumn, 2022
	Instructor	Zumrud Aslanova
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	Phone:	
	Classroom/hours	11 Mehseti str. (Neftchilar campus)
	Office hours	
Prerequisites	Consent of instructor	
Language	English	
Compulsory/Elective	Elective	
Required textbooks and course materials	<p>Core textbook:</p> <ul style="list-style-type: none"> Richard L. Christiansen, John R Fanchi, Introduction to Petroleum Engineering 	
Course outline	<p>This course is designed for the Petroleum Students and other Technical Specialties. Course addresses the basic principles of Petroleum Engineering. Some concepts from Reservoir Engineering, Exploration, Drilling and Completion will be covered during the course. Practical exercises on reserve estimation and pore pressure calculations will be addressed.</p>	
Course objectives	<p>Generic Objective of the Course:</p> <ul style="list-style-type: none"> ✓ To equip students with the basic concepts, methods and techniques in petroleum engineering. ✓ To prepare students for the industry environment <p>Objectives of the Course:</p> <ul style="list-style-type: none"> ✓ To support the students academically, to improve their chance of realizing their potential ✓ To encourage students participation and interaction and fostering atmosphere of tolerance and respect ✓ To develop an understanding of the theory and practice of managerial analysis, and strategic decisions <p>The contents will be based on general concepts which were provided during previous class Quizzes will cover the materials covered in previous classes. There will be 6 quizzes during semester.</p>	

Learning outcomes	By the end of the course the students should be able: <ul style="list-style-type: none"> ✓ To understand petroleum play ✓ To be familiar with basics of exploration, drilling and completion ✓ To estimate reserves ✓ To understand reservoir engineering concepts 		
Teaching methods	Lecture		x
	Group discussion		x
	Experiential exercise		x
Evaluation	Methods	Date/deadlines	Percentage (%)
	Midterm Exam		30
	Class Participation		5
	Assignment and quizzes		10
	Project		15
	Final Exam		40
	Total		100
Policy	<ul style="list-style-type: none"> ▪ Presentation Each student has one presentation during this course. Given topics will give to the students and they should make a presentation about topic and present for other students every week. ▪ Project objectives Students should search about given topic from book Students should hand in two reports in .docx and .PDF format about their researches and presentation. Dead line for handing in all reports, presentations on one DVD is until final exam day. It should be noticed that, students lecture, or presentations will consider as references for their quizzes and exams. ▪ Preparation for class The structure of this course makes your individual study and preparation outside the class extremely important. The lecture material will focus on the major points introduced in the text. Reading the assigned chapters and having some familiarity with them before class will greatly assist your understanding of the lecture. After the lecture, you should study your notes and work relevant problems and cases from the end of the chapter and sample exam questions. Throughout the semester we will also have an assignment. ▪ Withdrawal (pass/fail) This course strictly follows grading policy of the School of Engineering and Applied Science. Thus, a student is normally expected to achieve a mark of at least 60% to pass. In case of failure, he/she will be required to repeat the course the following term or year. ▪ Cheating/plagiarism Cheating or other plagiarism during the Mid-term and Final Examinations will lead to paper cancellation. ▪ Professional behavior guidelines The students shall behave in the way to create favorable academic and professional environment during the class hours. Unauthorized discussions and unethical behavior are strictly prohibited. 		

Tentative Schedule			
Week	Date/Day (tentative)	Topics	Textbook/Assignments
1	Week 1	<ul style="list-style-type: none"> • Course Introduction 	Chapter 1
2	Week 2	<ul style="list-style-type: none"> • Basics of Petroleum Geology. Reservoir, Trap, Seal, Timing, Maturation & Migration 	Chapter 6
3	Week 3	<ul style="list-style-type: none"> • Reservoir Rock and Fluid Properties 	Chapter 3
4	Week 4	<ul style="list-style-type: none"> • Reservoir Rock Fluid Properties (continued) 	Chapter 4
5	Week 5	<ul style="list-style-type: none"> • Basics of Reservoir Engineering, Drive Mechanisms 	Chapter 1 and 14
6	Week 6	<ul style="list-style-type: none"> • Basics of Reservoir Engineering, Drive Mechanisms (continued) 	Chapter 1 and 14
7	Week 7	<ul style="list-style-type: none"> • Midterm Exam 	
8	Week 8	<ul style="list-style-type: none"> • Introduction to Petrophysics 	Chapter 7 and 9
9	Week 9	<ul style="list-style-type: none"> • Basics of Drilling and Completion 	Chapter 8
10	Week 10	<ul style="list-style-type: none"> • Basics of Drilling and Completion(continued) 	Chapter 10
11	Week 11	<ul style="list-style-type: none"> • Basics of Production Engineering 	Chapter 1 and 14
12	Week 12	<ul style="list-style-type: none"> • Reserve Estimation 	Chapter 2
13	Week 13	<ul style="list-style-type: none"> • Reserve Estimation (continued) 	Chapter 2
14	Week 14	<ul style="list-style-type: none"> • Environmental Issues. Alternative Energy Sources 	
	TBA	➤ Final Exam	

This syllabus is a guide for the course and any modifications to it will be announced in advance.