



# Al-Ayen University / College of Petroleum Engineering

### **Template of Course Specification**

### Name and Scientific title of the subject instructor: Dr. Abdulhussien Neamah Shnawa AL-attabi

Name of Course: Petroleum Engineering Economics-3d stage

### **Course Specification**

		///				
1.	Teac	hing Institution	Al-Ayen University / College of			
			Petroleum Engineering			
2.	Univ	ersity Department /	Petroleum Engineering			
	Center					
3.	Course Title / Code		Petroleum EngineeringEconomic/PE308			
4.	Prog	ram(s) to which it	B.Sc. in petroleum Engineering			
	conti	ributes				
5.	Mod	es of Attendance offered	Class attendance			
6.	Seme	ester/Year	1st and 2nd, 2023			
7.	Number of hours tuition (total)		60			
8.	Date of production/revision of		Jan. 2023			
	this S	Specification				
9.	Aims	ns of the Course: The student will know the following:				
	1	The significant of the economy for leading the country and oil prices				
		effects on it.				
	2	Analysis of engineering projects, risk analysis, production decline				
		curve.				
	3	Oil and gas reserve, Organizations of petroleum exporting and				
		importing countries.				
	4	analysis of engineering projects, risk analysis, production decline				
	~	curve.				
	5	Evaluation of future production of oil and gas well sand, expenditure				
10	<b>T</b>	and net present value.	T			
10.			Learning and Assessment Methods			
	A	Knowledge and understanding: Oil and gas reserve and				
	D	International supply and demand of petroleum,				
	В	Subject-specific skills: Methods of engineering decision/depreciation				
		amortization, taxation, inflation, sensitivity analysis of engineering				
	С	projects.				
	C	<b>Assessment methods:</b> The assessment method are divided into three				
	D	parts; quizzes, monthly exams, and final exams.				
	D	Thinking Skills: Economic analysis and evaluations - to				





	encourage students' participation and interaction and fostering atmosphere of tolerance and respect - to develop economic		
	sensitivity of engineers		
Е	<b>Teaching and learning methods:</b> The teaching is performed		
	theoretically based upon theoretical concepts of petroleum		
	Engineering Economy		
F	General and Transferable Skills (other skills relevant to		
	employability and personal development): The most important		
	thing that a student learns when working in his field of specialization		
	is how to make the decision to choose a successful project, avoid risks		
	and achieve profits for the company.		

11.	Course Structure				
Week	Hours	Required Teaching Outputs	Unit/Module or Topic Title	Teaching Methods	Assessment Methods
1.	2	Student will understand	Introduction (Review of Fundamental Concepts of Economic of Petroleum Eegineering)	Theoretical	Quizzes, monthly exams, and final exams
2.	2	Student will understand	Oil and gas reserve	Theoretical	Quizzes, monthly exams, and final exams
3.	2	Student will understand	Types of oil and gas reserve.	Theoretical	Quizzes, monthly exams, and final exams
4.	2	Student will understand	Organization of exporting and importing Countries	Theoretical	Quizzes, monthly exams, and final exams
5.	2	Student will understand	Classification of Petroleum	Theoretical	Quizzes, monthly exams, and final exams
6.	2	Student will understand	Classification of petroleum	Theoretical	Quizzes, monthly exams, and final exams
7.	2	Student will understand	Petroleum Pricing	Theoretical	Quizzes, monthly exams, and final exams
8.	2	Student will understand	OPEC international oil exporting organization	Theoretical	Quizzes, monthly exams, and final exams



					PETROLEUM EN
			concurrent force		
9.	2	Student will understand	OPEC and the quota system	Theoretical	Quizzes, monthly exams, and final exams
10.	2	Student will understand	Types of petroleum Contracts	Theoretical	Quizzes, monthly exams, and final exams
11.	2	Student will understand	The axes in the contracts	Theoretical	Quizzes, monthly exams, and final exams
12.	2	Student will understand	Alternative energy	Theoretical	Quizzes, monthly exams, and final exams
13.	2	Student will understand	International strategy of energy	Theoretical	Quizzes, monthly exams, and final exams
14.	2	Student will understand	Fundamental property of oil and gas	Theoretical	Quizzes, monthly exams, and final exams
15.	2	Student will understand	Evaluating and producing property	Theoretical	Quizzes, monthly exams, and final exams
16.	2	Student will understand	Evaluating and producing property	Theoretical	Quizzes, monthly exams, and final exams
17.	2	Student will understand	Time value of money	Theoretical	Quizzes, monthly exams, and final exams
18.	2	Student will understand	Types of interest	Theoretical	Quizzes, monthly exams, and final exams
19.	2	Student will understand	Types of interest	Theoretical	Quizzes, monthly exams, and final exams
20.	2	Student will understand	Rate of return	Theoretical	Quizzes, monthly exams, and final exams
21.	2	Student will understand	Methods of Engineering decision	Theoretical	Quizzes, monthly exams, and final exams
22.	2	Student will understand	Depreciation, depletion	Theoretical	Quizzes, monthly exams, and final exams
23.	2	Student will understand	inflation	Theoretical	Quizzes, monthly exams,





					and final exams
24.	2	Student will understand	Amortization, Taxation	Theoretical	Quizzes, monthly exams, and final exams
25.	2	Student will understand	Sensitivity analyzing of Engineering project	Theoretical	Quizzes, monthly exams, and final exams
26.	2	Student will understand	Risk analysis decline production curve	Theoretical	Quizzes, monthly exams, and final exams
27.	2	Student will understand	Risk analysis decline production curve	Theoretical	Quizzes, monthly exams, and final exams
28.	2	Student will understand	Evaluation of Future production of oil and gas sand well	Theoretical	Quizzes, monthly exams, and final exams
29.	2	Student will understand	Expenditure and net present value	Theoretical	Quizzes, monthly exams, and final exams
30.	2	Student will understand	Net present value and Review's	Theoretical	Quizzes, monthly exams, and final exams

12. Infrastructure			
Required reading:	Economic Evaluation in the petroleum industry.		
·CORE TEXTS	Mohan Kelker,PH.D		
·COURSE MATERIALS	The university of Tulsa		
·OTHER			
Special requirements	Petroleum Engineering Handbook		
(include for	Larry W. Lake, Editor-in-Chief		
example workshops,	Chapter 16 – Petroleum Economics		
periodicals, IT	John D. Wright, SPE, Norwest Questa		
software, websites)	Engineering Corp.		
1 2 2	Pgs. 767-807		
G 1	ISBN 978-1-55563-108-6		
A1 -	Get permission for reuse		
<b>Community-based</b>	Principles of Petroleum Economics.pdf1		
facilities) include for	<u>Course Hero</u>		
example, guest Lectures,	https://www.coursehero.com/file/63997342/Principles-		
internship, field studies)	of-Petroleum-Economicspd		
	WebTo Summarize <b>Petroleum economics</b> is the voice		
	that tells oil companies whether, for example, drilling		





an exploratory well, building a pipeline to connect an oil field to a refinery, or selling gasto a power station ought to make them richer or poorer.

...

## 13 The development of the curriculum plan

Adding more technical skills by introducing more Economic examples of Petroleum Companies Contracts

