Republic of Iraq

The Ministry Of Higher Education

& Scientific Research



University: Diyala College: Engineering Department: Chemical Stage: Second Lecturer name: Huda A. Abdul-Kader Qualification: M.Sc. Place of work: Diyala University

Flow up of implementation celli pass play

Course Instructor	Huda A. Abdul-Kader						
E-mail	hudaaamer ۲۰۱	hudaaamer ^Y · ⁾ ·@yahoo.com					
Title	Properties of Pe	Properties of Petroleum and Natural Gas					
Course Coordinator	Annually	Annually					
Course Objective	This course is intended as an introduction a petroleum refining and natural gas fractionation units .						
Course Description	۲. Physical ۳. crude oil ٤. Refining ۹. Petroleun ٦. Gases Pr ۲. Chemica	 ¹. Classification of crude oil. ². Physical and Chemical Properties of Crude Oil. ³. crude oil Preparation for Refining. ⁴. Refining (Distillation) of Crude Oil. ⁶. Petroleum Products. ⁷. Gases Production from Petroleum Products. ⁷. Chemical Processes in Petrochemicals Industrials. ⁶. Natural Gas treatment. 					
Textbook	W.L.Nelson." Petroleum Refinery Engineering". ^{2rd} edition, ⁷ . ¹⁷ .						
	Term Tests	Laboratory	Quizzes	Project	Final Exam		
Course Assessments	۳.٪	١٠٪	۱۰٪	-	٦٠%		
General Notes	This subject is important to understand classification of crude oil and evaluation of petroleum ,latent heat ,heat of combustion and behavior of real gases						

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Course Weekly Outline

Week	Date	Topes Covered	Lab. Experiment Assignments	Notes
1	۲۲ and ۲٤, Sep. ۲۰۱٤	Introduction and Definition of Petroleum.	Flash point	
۲	۲۹, Sep. ۲۰۱٤ ۱, Oct. ۲۰۱۶	Chemical analysis of crude oil.	Pour point	
٣	\cdot 7 and $^{\wedge}$, Oct. $7 \cdot 12$	Classification of crude oil	Viscosity	
٤	۱۳ and ۱۰, Oct. ۲۰۱٤	Crude oil degassing (or Natural gas Removal from crude oil)	Viscosity index	
0	۲۰ and ۲۲, Oct. ۲۰۱۶	Sulphur recovery from petroleum gases.	Aniline point	
٦	۲۷ and ۲۹, Oct. ۲۰۱٤	Crude oil and gas reservoirs	API and density test	
٧	r and \circ , Nov. r r	Physical and Chemical Properties of Crude Oil.	Petroleum distillation	
^	1 • and 17, Nov. 7 • 12	Mechanical properties :(Density , Viscosity , Surface tension)	Ash content	
٩	1^{\vee} and 1° , Nov. $7 \cdot 1^{\circ}$	Thermal properties		
۱.	۲٤ and ۲٦, Nov. ۲۰۱٤	Optical properties		
11	• 1 and ^r , Dec. ^r •1 [£]	Crude Oil Preparation for Refining.		
١٢	\cdot^{Λ} and \cdot^{\cdot} , Dec. $\cdot^{\cdot}_{\cdot}_{\cdot}_{\cdot}_{\cdot}_{\cdot}$	Crude oil degassing (or Natural gas Removal from crude oil)		

١٣	1° and 7° , Dec. 7.1°	Crude oil stabilization					
10	۲۲ and ۳۱, Dec. ۲۰۱٤	Dehydration and Desalting from Crude Oil					
١٦	•• and • \forall , Jun. \forall •) ϵ	Methods of Emulsions Breaking.					
Half-Year Break							
1 V	17 and 14, Feb. 7.10	Dewaxing from lubricating oils					
١٨	۲۳ and ۲۰, Feb. ۲۰۱۰	Fractional Distillation Column					
١٩	• γ and • ϵ , Mar. γ • γ •	Production of petroleum					
۲.	۹ and ۱۱, Mar. ۲۰۱۰،	Gases Production from Petroleum Products.					
۲۱	γ and γ , Mar. γ	Hydrocarbon Production (Fischer tropsch synthesis).					
22	•) and • 7, April, $7 \cdot 10$	Alcohol Production					
۲۳	• \wedge and \vee ", April \vee • 10	Hydrocracking, Thermal Reforming					
٢٤	1° and 7° , April $7^{\circ}1^{\circ}$	Catalytic reforming, and Coke formation					
۲0	1 and 1 , April 1.10	Hydrogen Treatment					
77	۲۹, April, ۲۰۱۰ ۰٤, May, ۲۰۱۰	Isomerization, Polymerization.					
۲۷	•7 and 11, May, 7•10	Introduction and Definition of Natural gas.					
۲۸	۱۳ and ۱۸, May, ۲۰۱۰	Natural Gas Hazards and Origin of Natural gases.					
29	۲۰ and ۲۰, May, ۲۰۱۰	Chemical composition, Terms used to describe gases.					
۳.	γ , May, γ , 10 γ and γ , June, γ , 10	Methods of Emulsions Breaking					
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INSTRUCTOR Signature:

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