The selected topics included in the Orientation Lecture for the Students

ш	Course Name	Code	Topics			Targ	eted I	F. 14 M. 1			
#				K1	S1	S2	S3	S4	V1	V2	Faculty Member
1	221CHET	Separation Process	 Introduction to Separations Flash Distillation Column Distillation Internal Balances Multicomponent Distillation Batch Distillation Liquid-liquid Extraction Mass Transfer Analysis Membrane Separations 	$\sqrt{}$	$\sqrt{}$	V		V	V	V	Dr. Santhi Raju Pilli
2	231CHET	Environmental Pollution	 Introduction to basic of chemical analysis, terminologies, units, notations, instruments, and uses. Illustrate the objectives of the course for the students. Classification of chemical analysis Quantitation in Instrumental Analysis The Standard Addition Method Infrared Spec UV spec HNMR Spec 	√	√	√		√	√	√	Dr. Mohammad Ehtisham Khan

,,	Course	G 1	m ·			Targ	geted 1	The Manager			
#	Name	Code	Topics	K1	S1	S2	S3	S4	V1	V2	Faculty Member
3	222CHET	Chemical Engineering Thermodynamics	 Introduction to Petroleum: Origin and occurrence, composition, classification and physico-chemical properties Separation Processes: Distillation of Crude Oil, Distillation of Light Ends Units Thermal and Catalytic Conversion Processes, Hydrotreating, Natural Gas Processing Discovering and drilling Processes and oil production, Oil and gas reserves in Saudi Arabia Function of Saudi Aramco processing & distribution facilities 	V	V	V		V	V		Dr. Wahid Ali
4	223СНЕТ	Process Heat Transfer	 Definitions And Fundamental Concepts: Introduction to heat transfer. Modes and Laws of Heat transfer. Introduction to Heat Exchangers: Heat Transfer Equipment. Dimensionless Numbers. Heat exchangers and their types. Flow types and LMTD calculation. Application of Heat exchangers. 	V	V	V		√	√	V	Dr. Wahid Ali

,,	Course Name	Code		m ·			Targ	eted 1	PLOs		Faculty Member	
#			Topics	K1	S1	S2	S3	S4	V1	V2		
5	224CHET	Mass Transfer Operations	>	Phase Equilibrium Principles and rate concept: Process variables Introduction to Mass Transfer Modes of mass transfer and pertaining laws Mass Transfer Operations: Distillation Absorption Extraction Crystallization Evaporation Humidification Drying Membrane separation	V	√	1		V	V	V	Dr. Wahid Ali
6	232CHET	Petroleum Refining and Testing		Concept of Process Control Process control Dynamics Closed/open loop system First order system & response Positive/negative feedback Control System and Components Components of a control system Controller types and their equations Closed loop transfer functions Instrumentations Process instruments and their working principles Concept symbols used Read and understand symbols	√	V	V	√	V	V	√	Dr. Mohamed Alomar

#	Course Name	Code	Torios			Targ	geted 1	Es sylty Moreh sy			
#			Topics		S1	S2	S3	S4	V1	V2	Faculty Member
7	233СНЕТ	Process Installation and Control	 Basic concept of environmental engineering Problems related to pollution Water pollution Air pollution Soil pollution Handling of hazardous chemical with safety Self-directed continuing professional development 	V	V	V	V	V	V	V	Dr. Wahid Ali