



Module (Course Syllabus) Catalogue 2023-2024

College/ Institute	Koya Technical Institute	
Department	Petroleum Technology / Operation & Control	
Module Name	Health Safety and Environment (HSE)	
Module Code	HSE303	
Degree	Technical Diploma <input checked="" type="checkbox"/>	Bachelor <input type="checkbox"/>
	High Diploma <input type="checkbox"/>	Master <input type="checkbox"/> PhD <input type="checkbox"/>
Semester	3	
Qualification		
Scientific Title	Assistant Lecturer	
ECTS (Credits)	5	
Module type	Prerequisite <input type="checkbox"/>	Core <input type="checkbox"/> Assist. <input checked="" type="checkbox"/>
Weekly hours		
Weekly hours (Theory)	(3)hrs Class	(6)Total hours Workload
Weekly hours (Practical)	()hr Class	()Total hours Workload
Number of Weeks	12	
Lecturer (Theory)	Hemn Sleman Ali	
E-Mail & Mobile NO.	Hemn.ali@epu.edu.iq 07501194478	
Lecturer (Practical)		
E-Mail & Mobile NO.		
Websites		

Course Book

Course Description	The Health Safety and Environment (HSE) field has become a topic of increasing importance over the last 30 years. The establishment of the Occupational Safety and Health Administration (OSHA) in 1970 reflected the recognition that safety in the workplace is a basic expectation for all employees. Originally addressing concerns in the industry and hazards associated with mechanical injury, the field of occupational health and safety has expanded to almost every workplace environment, from the office to the aeroplane, as well as to the laboratory and the vivarium.				
Course objectives	<ol style="list-style-type: none"> 1- maintain the physical, mental and social well-being of workers. 2- To prevent the unfavourable effects on health caused by working conditions 3- To become familiar with an occupational environment of the physical and mental needs of workers. 4- To consider the issues relating to industrial safety, occupational medicine, industrial hygiene, training & education, psychology, etc. 				
Student's obligation	It is necessary for all the students to listen and write notes and their obligations throughout the academic year and the attendance and completion of all tests, and exams. Depending on the lecture, it should also be practised in the laboratory or another place.				
Required Learning Materials	Lecture halls with data show equipment for lecture presentations, whiteboard, overhead projector, posters and data collection according to lectures. Field visits to some industries in the area.				
Evaluation	Task	Weight (Marks)	Due Week	Relevant Learning Outcome	
	Paper Review				
	Assignments	Homework	10		
		Class Activity	2		
		Report	8		
		Seminar	8		
		Essay			
		Project			
	Quiz		8		
	Lab.				
	Midterm Exam		24		
	Final Exam		40		
	Total		100		

Specific learning outcome:	At the end of year, the student will be able to: - <ol style="list-style-type: none"> 1- recognize the occupational hazards in general and the methods of protection from the hazards. 2- recognize some occupational diseases and the methods of protection from such diseases. 3- Learn What is importance of occupational health for increasing productivity in various fields of life. 4- To know the significance of toxic materials. 5- Definition of occupational health and safety and discussion of some historical aspects of occupational health and safety in developed countries and comparison with some aspects of occupational health in developing countries. 	
Course References:	<ol style="list-style-type: none"> 1. Textbook of public health and community medicine 2. Textbook of Community and social medicine in developing Countries 3. Textbook of occupational health /by Prof. Hikmat Jamel university of Baghdad Parks textbook of preventive and social medicine/ K, PARK M.B.B.S., M.S.	
Course topics (Theory)	Week	Learning Outcome
Introduction and historical background of occupational health and safety	First	
Type of Hazards in Occupation	Second	
Mechanical Hazards (Type of accident)	Third	
Noise –the difference between (Noise & sound)- How noise damages the ear – Health effects and -Protective measures of Noise	Fourth	
Vibration – What injuries can vibration cause - Control and prevention of vibration	Fifth	
Heat Hazards –Health Effects-Controlling of Heat Hazards	Sixth	
Cold Hazards – Health effects - Controlling Cold hazards	Seventh	
Radiation – Ionizing and Non Ionizing radiation -Preventive exposure to Ionizing radiation -Preventive exposure to Non Ionizing radiation	Eighth	
Lightening (illumination) -The effect of lightening on the human being	Ninth	
Chemical hazards -Type of Chemical hazards..... The health effects of chemical hazards	Tenth	

Chemical hazards in occupation, Asphyxiant gases, oxidant gases and Irritant gases	Eleventh	To learn Type of chemical hazards
(CO ₂ , CO) definition, sources, health effects, prevention and control	Twelfth	To learn the Hazards of Co and Co ₂
Safety Sign and Notices		
Fire and fire extinguisher		
Practical Topics	Week	Learning Outcome
<p>Questions Example Design</p> <p>Different question for examples:-</p> <p>Q/ choose the correct answer?</p> <p>Q /Match the following.....?</p> <p>Q/ fill the following blankets?</p> <p>Q/ Enumerate?</p> <p>Q/ Briefly explain or define the following?</p> <p>Q/ MCQ (multiple choice question)</p> <p>Q/ Write on</p> <p>Q/ Fill the following</p> <p>Q/ Case management</p>		
Extra notes:		
External Evaluator		