

Faculty of Engineering & Technology

Engineers and the Environment

Information :

Course Code : SCM 233

Level : Undergraduate

Course Hours : 2.00- Hours

Department : Department of Structural Engineering & Construction Management

Instructor Information :

Title	Name	Office hours
Lecturer	Aya Hanfay Reda Hanfy Mohamed	1

Area Of Study :

Upon successful completion of this course, the student should be able to: - Understand the basic concepts and main principles - Calculate the values of the essential terms
Regarding Environmental Engineering water pollution air pollution noise & vision pollution industrial effluent
Recycle process

Description :

Overview: ecosystem and its balance, unbalance and restoration.
Water: water resources and its balance, Water quality, Types of pollution, and its sources, Basis of pollution control.
Air: composition of air, air pollution, sources of air pollution, air quality monitoring and measurements, air pollution control.
Noise: noise pollution, characteristics of noise and acoustic environment, sources of noise pollution, noise monitoring and measurements, effects of noise, noise control.
Vision: vision pollution.
Solid and hazardous wastes: sources, handling, and its management, recycle and reuse.
Environmental impact assessment (EIA): environmental awareness, environmental protection acts.

Course outcomes :

a. Knowledge and Understanding: :

1 -	Explain the principals of Environmental Engineering
2 -	Define the main terms of water pollution
3 -	Define the main terms of air pollution
4 -	Define the main terms of noise & vision pollution
5 -	Explain the principals of industrial effluent
6 -	Describe the main concept of Recycle process

b. Intellectual Skills: :

1 -	Solve problems regarding water pollution
2 -	Solve problems regarding air pollution
3 -	Solve problems regarding noise & vision pollution
4 -	Assess issues of industrial effluent
5 -	Assess issues of Recycle process

c. Professional and Practical Skills :

1 - Prepare technical reports for Recycle process

d. General and Transferable Skills :

1 - Work under stress

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Environmental Engineering	2	2	0
water pollution	6	6	0
Air Pollution	6	6	0
noise & vision pollution	4	4	0
industrial effluent	4	4	0
Recycle process	6	6	0
Revision	2	2	0

Teaching And Learning Methodologies :

Interactive Lec.
Discussion
Problem Solving
Report / Present

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Final Exam	40.00		
Mid- Exam I, II	30.00		
Quizzes / Assig	15.00		
Report / Present	15.00		