

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						