

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 :

Introduce the principles of environmental engineering.
 Describe the causes the water resources and air pollutions.
 Illustrate noise and vision pollutions.
 Demonstrate the management and recycle process of the solid and hazardous wastes.

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 -	Identify the water resources.
2 -	Outline the causes of pollutions of air and water resources.
3 -	List kinds of pollutions.

b. Intellectual Skills: :

1 -	Solve the problems of environmental pollutions and their causes.
2 -	Manipulate the solid and hazardous wastes.

c. Professional and Practical Skills: :

1 -	Prepare technical reports related to course topics.
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d. General and Transferable Skills: :

1 -	Present ideas and information effectively.
2 -	Search for information and data in the web and library.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction to Principle of Environmental Engineering		4	
Pollutions of water resources		6	
Air Pollution		4	
Noise and Vision Pollution		4	
The Industrial Effluent		2	
Management and Recycle Process		6	
Presentations of Reports		4	

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Final exam	40.00		
First mid-term exam	15.00		
Performance & Participation	10.00		
Presentations	10.00		
Reports	10.00		
Second mid-term exam	15.00		