Faculty of Engineering & Technology

Environmental and Sanitary Engineering

Information :

Course Code :	SCM 521	**Level :**	Undergraduate	**Course Hours :**	3.00- Hours

Department : Department of Structural Engineering & Construction Management

Instructor Information :

Title	Name	Office hours
Associate Professor	Faten Abd Elghafar Ragheb Elsergany	4
Associate Professor	Faten Abd Elghafar Ragheb Elsergany	4
Assistant Lecturer	Youssef Ahmed Elsayed Kamaleldin Ahmed Awad	2
Teaching Assistant	Mahmoud Mohamed Khalaf Ahmed	
Teaching Assistant	Mohamed Yahia Mohamed Abdelkader	4

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 primary studies collection works water purification wastewater treatment layout of WWTP

Description :

Definitions, Fields of environmental and sanitary engineering, Biosphere and environmental cycles, Issues of environmental pollution, Water supply engineering: Water demands, sources of water supply, collection works, purification works, distribution works, Sanitary drainage: sources of wastewaters, sewerage systems, hydraulic design, network accessories, sewage treatment systems.

Course outcomes :

a.Knowledge and Understanding: :	
1 -	Describe the main concept of primary studies
2 -	Define the main terms of collection works
3 -	Explain the principals of layout of WWTP
b.Intellectual Skills: :	
1 -	Design the elements of primary studies
2 -	Assess issues of collection works
3 -	Analyze the system of water purification
4 -	Analyze the system of wastewater treatment
5 -	Assess issues of layout of WWTP
c.Professional and Practical Skills: :	
1 -	Apply Code provisions regarding water purification

2 -	Apply Code provisions regarding wastewater treatment
3 -	Prepare technical reports for layout of WWTP
d.General and Transferable Skills: :	
1 -	Work under stress

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Primary studies	10	6	4
Collection works	15	9	6
Processes of water purification	15	9	6
Principles wastewater treatment	15	9	6
Layout of WWTP	15	9	6

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		

Course Notes :

Handouts by the lecturer

Recommended books :

"The Civil Engineering Handbook ", 2nd Edition, Wai-Fah Chen, CRC, 2002