



Course Descriptor ENEN441 AIR POLLUTION

Proposed Academic Year	2020/2021	Last Reviewed Academic Year	2019/2020
Course Code	ENEN441	Course Title	Air Pollution
Credit hours	3	Level of study	Forth
College / Centre	College of Engineering	Department	Environmental Engineering
Co-requisites		Pre-requisites	CVEN361

1. COURSE OUTLINE

This course discusses the basic of air pollution and their sources. Topics covered include measurement techniques, physical, chemical and biological effects on ecology. Common air pollution in the Middle East, and their sources. Transport, dispersion and diffusion of air pollutants. Air pollution control processes. Air pollution control legislation and Kyoto Agreement.

2. AIMS

The course provides students with concepts and techniques that enable them to understand the air pollution, their sources and the measurement techniques.

3. LEARNING OUTCOMES, TEACHING, LEARNING and ASSESSMENT METHODS (Indicative)

Learning Outcomes (Definitive)	Teaching and Learning methods (Indicative)	Assessment (Indicative)
1. Understand air pollution which related to the environment	Lectures	Assignments and in-class tests
2. Understand the sources of air pollution	Lectures	Assignments and in-class tests
3. Ability to analyze continuous the environmental issues from air pollution approach	Lectures	Assignments and in-class tests

4. ASSESSMENT WEIGHTING

Assessment	Percentage of final mark (%)
Assignments	20%
Mid-term Examinations (two)	40%
Final Examination	40%
TOTAL	100%

5. ACHIEVING A PASS

Students will achieve 3 credit hours for this course by passing **ALL** of the course assessments and achieving a **minimum overall score of 50%**.

NB *Ensure that ALL learning outcomes are taken into account

6. COURSE CONTENT (Indicative)



Course Descriptor
ENEN441 AIR POLLUTION

LECTURE TOPIC	TIME (HOURS)
Introduction to air pollution	6
Measurement techniques	3
Climate and Weather	3
Physical and biological effects on ecology	6
chemical effects on air pollutants	6
Transport, dispersion and diffusion of air pollutants	6
Oxidation- reduction, precipitation dissolution	6
Common air pollution in the Middle East, and their sources..	3
Air pollution control processes. Air pollution control legislation and Kyoto Agreement	6
TOTAL HOURS	45
Plus RECOMMENDED INDEPENDENT STUDY HOURS	
TOTAL COURSE HOURS	45

7. RECOMMENDED READING

Core text/s:

Fundamentals of Air Pollution, Fifth Edition 5th Edition by Daniel Vallero (Author)

Library + online resources:

<https://www.oercommons.org/courses/combustion-and-air-quality-emissions-monitoring/view>

https://askabiologist.asu.edu/experiments/air_pollution

<https://www.oercommons.org/courses/air-pollution-4/view>