UNIVERSITI TEKNOLOGI MARA

BCT480: ENVIRONMENTAL ASSESSMENT

Course Name (English)	ENVIRONMENTAL ASSESSMENT APPROVED
Course Code	BCT480
MQF Credit	3
Course Description	This course is an introduction to environmental control for B. Sc. (Hons.) Bio-Composite Technology in the Faculty of Applied Sciences. The course provides an overview of many topics in environmental science with particular emphasis on current environmental issues and problems. Topics will be discussed include nature and sources of air, water, and noise pollution and hazardous waste management and scientific principles dealing with these issues. Other topics will be covered include the application of remote sensing and GIS in environmental monitoring, climate change and carbon sequestration. This course will also explore environmental impacts and ecosystem function concepts as they pertain to natural environments and man's impact on the earth's resources.
Transferable Skills	Applying knowledge on environmental issue
Teaching Methodologies	Lectures, Field Trip, Presentation
CLO	CLO1 Define the earth's atmosphere, pollution and pollutants, and write and explain the different natural and anthropogenic sources of air pollution CLO2 State and identify major air pollutants i.e., particulate matter, carbon dioxide, sulphur dioxide, hydrocarbon and nitrous oxide CLO3 Assess and discuss of the importance of freshwater in protecting and conserving natural environments CLO4 Identify and categorize sources of water pollution, noise pollution and hazardous waste management CLO5 State, write and describe issues of global warming, green house effects and carbon sequestration
Pre-Requisite Courses	No course recommendations

Topics
1. The atmosphere, temperature regions and atmospheric stability 1.1) n/a
2. Source of air pollution, natural and anthropogenic 2.1) n/a
3. Primary air pollutants 3.1) • Particulate matter (PM) 3.2) • Carbon monoxide (CO) 3.3) • Sulfur oxides (SOx) 3.4) • Hydrocarbons (HC) 3.5) • Nitrogen oxides (NOx)
4. Freshwater environment, lentic and lotic water systems Water pollution 4.1) • Categories 4.2) • Sources 4.3) • Effects 4.4) • Preventive measures

5. Noise pollution 5.1) • Factors 5.2) • Sources 5.3) • Measurement 5.4) • Effects 5.5) • Controls
6. Hazardous waste management 6.1) • Characteristics 6.2) • Management aspects
7. Remote sensing and Geographic Information System (GIS) 7.1) • Theory 7.2) • Application
8. Environmental Impact Assessments 8.1) • Components 8.2) • Process 8.3) • Monitoring
9. Climate change 9.1) • Greenhouse effects and gases 9.2) • Sources 9.3) • Impacts 9.4) • Control measures

Assessment Breakdown	%
Continuous Assessment	50.00%
Final Assessment	50.00%

Details of Continuous Assessment

Assessment Type	Assessment Description	% of Total Mark	CLO
Assignment	n/a	5%	CLO1 , CLO2 , CLO3
Quiz	Two Quiz	5%	CLO1
Test	Test 1	15%	CLO1 , CLO2
Test	Test 2	15%	CLO3 , CLO4 , CLO5
Written Report	Field Visit Reports	10%	CLO3 , CLO4

Reading List

Recommended Text

- **Peirce, J.J., R. Weiner, and P.A. Vesilind, *Environmental Pollution and Control*, 4th Edition Ed.**
- **Petts, J., *Handbook Of Environmental Impact Assessment***

Article/Paper List: This Course does not have any article/paper resources

Other References: This Course does not have any other resources