



UNIVERSITI TEKNOLOGI MARA

CMT570: ENVIRONMENTAL POLLUTION LABORATORY

Course Name (English)	ENVIRONMENTAL POLLUTION LABORATORY APPROVED
Course Code	CMT570
MQF Credit	1
Course Description	This course is aimed to provide the fundamental practical skills the environmental pollution measurement. It design for student to become proficient in techniques for analyzing environmental parameters related to water pollution, air pollution and pollution due to solid waste. Students will acquire the learn how to carry out experiments safely and carefully in the laboratory, as well to obtain data accurately and to manipulate the data correctly. It complements the theoretical knowledge and enhances more holistic understanding towards the various types' environmental pollution measurement.
Transferable Skills	communicating concisely; organization, planning and time management; data handling and technical knowledge; teamwork; leadership
Teaching Methodologies	Blended Learning, Lab Work, Presentation, Small Group Sessions
CLO	CLO1 Demonstrate the practical skills in environmental pollution related experiments. CLO2 Interpret experimental data in environmental pollution related experiments. CLO3 Communicate scientific ideas verbally of environmental pollution related data.
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction to the course, handling and safety rules,lab rules and regulations 1.1) 1.1 Welcoming student to campus 1.2) 1.2 Safety briefing and laboratory rules and regulations	
2. Experiment 1: Quantitative determination of organic carbon in water 2.1) N/A	
3. Experiment 2: Quantitative determination of organic nitrogen in water samples 3.1) N/A	
4. Assessment 4.1) N/A	
5. Experiment 4: Quantitative determination of total suspended solids in water sample 5.1) N/A	
6. Experiment 3: Quantification and characterization of solid waste 6.1) N/A	
7. Assessment 7.1) N/A	
8. Assessment 8.1) N/A	
9. Experiment 5: Quantitative determination of particulate matter in air 9.1) N/A	
10. Experiment 6: Classification the type and texture of soil 10.1) N/A	
11. Assessment 11.1) N/A	

12. Assessment 12.1) N/A
13. Assessment 13.1) N/A
14. Revision 14.1) N/A

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Practical	Practical skills/knowledge will be evaluated after completion of the laboratory sessions	30%	CLO1
	Presentation	Oral presentation will be conducted after completion of the laboratory sessions.	10%	CLO3
	Written Report	Laboratory Report	60%	CLO2

Reading List	Recommended Text	<i>Laboratory booklet provided by the program</i>
Article/Paper List	This Course does not have any article/paper resources	
Other References	<ul style="list-style-type: none"> • n/a Jorge G. Ibanez and Margarita Hernandez-Esparza 2008, <i>Environmental Chemistry: Microscale Laboratory Experiments</i> , Springer • n/a Maria Csuros 1997, <i>Environmental Sampling and Analysis: Lab Manual (Springer Lab Manuals)</i> 	