Semester:	2						
Course Code:	ENCM 12742						
Course Name:	Environmental Pollution						
Credit Value:	2						
Status	Compulsory						
Pre-requisites	GCE A/L Biology						
Co-requisites	None						
Hourly Breakdown	Theory	Practical	Independent Learning				
	30	-	70				

Intended Learning Outcomes:

After completion of this course unit, the student will be able to;

- 1. describe the major types of pollutants and causes for environmental pollution,
- 2. explain the impacts of environmental pollution on ecosystem health, and
- 3. demonstrate competencies in the application of appropriate prevention methods to minimize the pollution impacts on ecosystems.

Course Content:

Introduction to environmental pollution: pollution sources and types of pollutants; Causes, environmental effects, prevention and control of following environmental pollutants/pollution: Criteria and non-criteria air pollutants, Atmospheric deposition, Photochemical smog, Ozone depletion, Global warming and Greenhouse effect, Thermal, odor and noise pollution, Indoor air pollution, Sediments and suspended matter, Agrochemicals, Persistent organic pollutants (POPs), Mineral oil, Thermal pollution, Radioactive pollutants, Nutrients and algal toxins, Plastic waste, Heavy metals and nanoparticles, Land degradation, Soil Compaction, Water logging, Soil salinization.

Teaching /Learning Methods:

A combination of lectures, laboratory and field practical sessions, computer-based learning, self-studies, field-based assignments and small group discussions.

Assessment Strategy: Continuous assessment and end of semester examination. Percentage given for each sub component indicates the percent contribution to the final marks.

Continuous Assessment		nt	Final Assessment			
	30 %		70 %			
Details:			Theory	Practical	Other	
Quizzes	10		70	-	-	
Assignments	20					

Recommended Readings:

- 1. Begum L. (2015). Water Pollution: Causes Treatments and solutions. 1st Edition CreateSpace Independent Publishing Platform.
- 2. Davis, W.T., Godish T, J.S. Fu (2015). Air Quality. 5th Edition, CRC Press.
- 3. Goel, P. K. (2011). Water Pollution: Causes, Effects and Control. 2nd Edition, New Age International, India.
- 4. Griffin R.D. (2013). Principles of Air Quality Management 2nd Edition. CRC press.
- 5. Mirsal, I. (2013). Soil Pollution: Origin, Monitoring & Remediation. Springer- Verlag Berlin Heidelberg.
- 6. Nesaratnam S.T and Taherzadeh S. (2014). Air Quality Management, John Wiley & Sons, NJ.