**MET 3203 Elements of Environmental Pollution and Control (3CU)**

**Description**

In this course the student is introduced to the four components of environmental media, the atmosphere, lithosphere, hydrosphere and biosphere. The student learns the common natural and anthropogenic induced forms of activities that pollute the environment and highlights possible measures of control.

**Objectives**

The course will help the students to achieve the following objectives

* Understand both natural and anthropogenic common forms of pollution
* Describe the impacts of pollution in different sectors
* Describe the methods used to control pollution

**Learning outcomes**

By the end of the course, the student should be able to:

* Understand both natural and anthropogenic common forms of pollution and how they are caused.
* Know elementary easy to apply pollution control measures
* Explain why global communities don’t readily apply the pollution control measures
* Learn of approaches to community persuasion.

**Intellectual, Practical and transferable skills**

* Problem solving
* Analytical
* communication

**Teaching and learning patterns**

The mode of learning involves direct contact with students in form of lectures, Tutorials and assignments

**Indicative content**

* Identification and definition of each of the environment media pollution
* Causes and types of environmental pollution in the developed and developing countries.
* The impact of environmental pollution on

- Climate change/variability

- The hydrological cycle & its role in fresh water replenishment

* + Ground pollution
* Under each of the subtopics below, the natural & anthropogenic causes and possible control measures for each form of pollution and why such measures are not be adopted by many global communities are expected*.*
  + the atmosphere
  + the waters (both fresh & saline)
  + the ground
* Indigenous and modern human habitats that minimize pollution

**Assessment Method**

The assessment method is structured to include course work, and final examination. Course work consists of assignments, reports and tests and accounts for 30% of the final grade. The final examination will account for 70% of the final grading

**Core Reference materials**

# Daniel A. Vallero (2008): Fundamentals of air pollution, *Academic Press*

# J. Jeffrey Peirce, Ruth F. Weiner, P. Aarne Vesilind (1998): Environmental pollution and control, *Butterworth-Heinemann*