

# **UNIVERSITY OF DELTA**

## **AGBOR, DELTA STATE**

### **DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AND TOXICOLOGY**

**COURSE TITLE: PRINCIPLES OF ENVIRONMENTAL SCIENCE**

**COURSE CODE: EMT 211 (2 UNIT)**

#### **COURSE DESCRIPTION**

Application of physical and chemical principles; Ecological concept; System approach to policy analysis of atmospheric environments, fresh water and marine environments, land use, energy supplies and technology and other resources.

#### **COURSE OUTLINE**

- Introduction to environment and environmental science; earth's physical processes.
- Chemical reaction mechanism in the environment.
- Ecological concepts
- Problems associated with natural resource utilization
- Air: Pollution and climate change
- Water: Resources, pollution and over utilization
- Land: Use and associated problems
- Energy supplied and technology
- Policy frameworks required to manage air, water, soil and biodiversity

#### **COURSE ACTIVITIES**

Week1 Introduction

Week2 Chemical mechanism in the environment

Week3-4. Ecological concepts

✓ Ecosystem

✓ Habitat and ecological niche

- ✓ Ecosystem resilience; disturbances and
- ✓ Ecosystem management
- Week5 Problems associated with natural resources utilization
- Week6 Air pollution
  - ✓ Acid rain
  - ✓ Ozone layer depletion
  - ✓ Global warming
- Week8 Climate change impact
  - ✓ Melting of polar ice
  - ✓ Poster Ireland flooding
  - ✓ Drought
  - ✓ Desertification
- Week9-10 Water: Resources pollution and over utilization
  - ✓ Entroplication in surface water
  - ✓ Plastic pollution
  - ✓ Ground water depletion
  - ✓ Dam and problem
- Week11-12 Land-Use and associated problem
  - ✓ Development and biodiversity loss (Due to pressure on land)
  - ✓ Soil health problems
  - ✓ Soil erosion
  - ✓ Soil salinity
  - ✓ Waterlogging
  - ✓ Fertilizer and pesticide problems
- Week 13 Energy supplies and technology
- Week 14 Policy frame works required to manage pollution. Air, water, soil  
and biodiversity loss
- Week 15-16 Examination

**Course Lecturers**

1. Awani, S.M
2. Atalor, B
3. Nwoko G.