EWCE-105 Environmental Chemistry Lecture Plan

Lecture Number	Topics to be covered
1	• Introduction of Environment • Concept of Environmental Science (Chemistry) • Anthrosphere and Human Activities
2	• Various Divisions of Environmental Chemistry • Green Chemistry • Example of Green Chemistry
3	• Integrated Waste Management • Concept of 3 R's • Examples related to 3 R's
4	• Evolution of Earth's Atmosphere • Atmospheric Structure • Atmospheric Composition
5	• Atmospheric State Variables • Concepts of Elementary Cycles
6	• Air Pollution • Components of Air Pollution • Categories of Air Pollution • Classification of Air Pollutants • Measurements of Units
7	• Particulates/Particulate Matter (PM)/ Aerosols • Carbon Monoxide (CO) • Nitrogen Oxides (NOx) • Sulphur Oxides (SOx) • Photochemical Smog
8	• Nitrogen Oxides (NOx) • Sulphur Oxides (SOx) • Photochemical Smog • Lead
9	• Photochemical Reactions in the Atmosphere
10	• Structure of the Ozone • Function of the Ozone Layer • Formation of the Ozone Layer (Ozone in Stratosphere) • Catalytic Destruction of the Ozone Layer • Ozone Hole • Ozone in Troposphere
11	• Greenhouse Gases • Greenhouse Effect • Climate Change (Greenhouse Warming)