

## NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

NPTEL Video Course - Multi Disciplinary - NOC:Introduction to Environmental Engineering and Science - Fundamentals

Subject Co-ordinator - Prof. Brajesh Kumar Dubey

Co-ordinating Institute - IIT - Kharagpur

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 1 - Sustainability Concepts - Innovations and Challenges  
Lecture 2 - Sustainability Concepts - Innovations and Challenges  
Lecture 3 - Basics and Sustainability Concepts and Evolution  
Lecture 4 - Engineering for Sustainability  
Lecture 5 - Life Cycle Thinking and Circular Economy  
Lecture 6 - Mass Concentration Units  
Lecture 7 - Partial Pressure Units  
Lecture 8 - Other Types of Units  
Lecture 9 - Units (Continued...), Qualitative and Quantitative Measurements  
Lecture 10 - Quantitative Measurements Basics  
Lecture 11 - Ecology  
Lecture 12 - Energy Flow and Ecological Concepts  
Lecture 13 - Population  
Lecture 14 - Population, Consumption and Biodiversity  
Lecture 15 - Environmental Chemistry  
Lecture 16 - Mass Balance and Reactor Systems  
Lecture 17 - Mass Balance in Continuous Reactor / Continuous Stirred Tank Reactor (CSTR) and Plug Flow Reactor  
Lecture 18 - Plug Flow Reactor and Energy Flow  
Lecture 19 - Energy Balance and Earth Overshoot Day  
Lecture 20 - Mass Transport Processes  
Lecture 21 - Oxygen Demand in Environmental Systems  
Lecture 22 - BOD Examples, Oxygen Levels in Surface Waters, COD  
Lecture 23 - Environmental Health Basics and SDGs  
Lecture 24 - Field Applications  
Lecture 25 - Nutrient Cycle  
Lecture 26 - Environmental Risk  
Lecture 27 - Risk Assessment Steps and EIA Introduction  
Lecture 28 - Environmental Risk Assessments with Concepts of EIA and LCA  
Lecture 29 - Environmental Risk Assessments with Concepts of EIA and LCA (Continued...)

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- Lecture 30 - Environmental Risk Assessments with Concepts of EIA and LCA (Continued...)
- Lecture 31 - Water Quantity
- Lecture 32 - Water Availability and Usage
- Lecture 33 - Population Forecasting
- Lecture 34 - Water Quality
- Lecture 35 - Water Quality (Continued...)
- Lecture 36 - Plain Sedimentation
- Lecture 37 - Coagulation
- Lecture 38 - Review of Sedimentation and Rapid Sand Filtration
- Lecture 39 - Disinfection and Water Supply
- Lecture 40 - Water Treatment Plant Visit
- Lecture 41 - Wastewater collection and characterization
- Lecture 42 - Sewerage System and Sewage Characteristics
- Lecture 43 - BOD Concepts and Preliminary Treatment of Wastewater
- Lecture 44 - Wastewater Treatment - I
- Lecture 45 - Activated Sludge Process and Sludge Disposal
- Lecture 46 - Introduction to Solid Waste Management
- Lecture 47 - Introduction to Solid Waste Management (Continued...)
- Lecture 48 - Components of Solid Waste Management
- Lecture 49 - Collection and Treatment
- Lecture 50 - Waste Disposal and Summary
- Lecture 51 - Basics of Air Pollution Issues - Global and Local
- Lecture 52 - Air Pollutants and Air Pollution Index
- Lecture 53 - Global Warming and Climate Change
- Lecture 54 - Air Pollution Models
- Lecture 55 - SDGs, Noise and Soil Pollution
- Lecture 56 - Present Issues and Few Case Studies
- Lecture 57 - Case Study - Solid Waste Management
- Lecture 58 - Case Study - Industrial Pollution and Disasters
- Lecture 59 - Case Study - Global Food Waste Initiatives
- Lecture 60 - Case Study - Global Food Waste and Resource Recovery