

COURSE CODE: ENS-212
COURSE NAME: Environmental Pollution
CREDIT HOURS: Theory = 3 Practical = 0 Total = 3
CONTACT HOURS: Theory = 48 Practical = 0 Total = 48
PREREQUISITE: None
MODE OF TEACHING: Three hours of lecture per week

Course Description:

The course is focused on introducing environmental pollution and its sources. It will also cover the existing laws related to pollutants in Pakistan and the conventions ratified internationally.

TOPICS COVERED:

| Week | Topic |
|-------------|---|
| 1 | Environmental Pollution, sources, types and causes |
| 2 | Types of pollutants: Physical, chemical and biological |
| 3 | Characteristics of domestic & industrial effluents |
| 4 | Effects of Pollutants on human & other living organisms |
| 5 | Effects of Pollutants on human & other living organisms |
| 6 | Industrial and Municipal Solid Waste |
| 7-8 | Principles of Waste Management & Disposal |
| 9 | Mid Semester Exam |
| 10 | Fate of pollutants; Factors affecting movement of pollutants in soil, air and water |
| 11 | Fate of pollutants; Factors affecting movement of pollutants in soil, air and water |
| 12 | Monitoring of Environmental Pollution |
| 13 | Pollution Control Strategies |
| 14 | Environmental Laws |

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| 15 | Pollutants Guidelines |
| 16 | International Protocols |
| 17 | Case Studies |
| 18 | End Semester Exam |

Text and Material:

1. Understanding Environmental Pollution, Hill, M.K., 2nd Edition. Cambridge University Press, Cambridge UK.
2. Environment Pollution: Types, Sources & Management. Ghafoor, A., G. Murtaza, M.Z. Rehman, M. Sabir, H.R. Ahmad and Saifullah. Allied Book Centre, Lahore, Pakistan. 2012.

ASSESSMENT SYSTEM:

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| Theoretical/Instruction | 100% |
| Assignments | 10% |
| Quizzes | 15% |
| Mid Semester Exam | 25% |
| End Semester Exam | 50% |
| Practical Work | 0% |
| Lab Attendance | 0% |
| Lab Report | 0% |
| Lab Quiz | 0% |
| Lab Rubrics | 0% |