

-Air pollution

- **Definition.**
- *Atmospheric chemistry (cycles and residence time).*
- *Types and sources of air pollution.*
- *Particulates (soot, smoke, ash, dust, and other solids).*
- *Gases (carbon, nitrogen, sulfur, ozone, and CFCs).*
- *Other pollutants (mercury, lead, cadmium, zinc and arsenic).*
- *Acid rain.*

- Water pollution

- *General principles, Geochemical cycles.*
- *Residence time.*
- *Point and non point pollution sources.*
- *Industrial pollution, Inorganic pollutants, Organic compounds.*
- *Thermal pollution.*
- *Eutrophication.*
- *Ground water pollution.*

- Agricultural pollution

- *Fertilizers, Sediment pollution.*
- *Herbicides and pesticides, Dredging.*

- Indoor pollution.

- *The causes of recent indoor pollution, The hazards.*
- *The risks of Radon.*

- The global warming (climate change).

- The treatments and the way to minimizing pollution:

- *Incineration, Deep well disposal.*
- *Municipal waste disposal.*
- *Open dumps. And sanitary landfills.*

الكتب الأساسية:

Lan L. Pepper, Charles P. Gorba, Mark L. Brusseau, " Environmental and Pollution Science ", 2006, Elsevier.

المرجع المساند:

Roy M. Harrison, " An Introduction to Environmental Chemistry and Pollution ", 2000, university of Birmingham, UK