



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Fundamentals of Environmental Engineering

ENVENG 6200

Credit Hours:

3.00 - 3.00

Course Levels:

Graduate

Course Components:

Lecture

Course Description:

Quantitative assessment of water quality, air quality, and solid/hazardous waste management, with an emphasis on minimizing human health and environmental impacts through sustainable design.

Prerequisites and Co-requisites:

Prereq: Chem 1220 (122) or 1250 (125), or Grad standing, or permission of instructor.

Course Goals / Objectives:

- Be skilled in the derivation and use of mass and energy balance equations to describe pollutant behavior in air, land and water systems
 - Have quantitative and qualitative skills in the management of water quality
 - Have qualitative and quantitative knowledge of the sources, fate, effects and control of air pollution
 - Have qualitative knowledge regarding the management of solid, hazardous and radioactive waste
 - Have qualitative knowledge of risk, environmental regulations, pollution prevention and sustainability
 - Demonstrate knowledge of environmental engineering problems that are of great contemporary concern
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Course Topics:

- Thermodynamics, mass balances, and energy balances for environmental systems
 - Water quality control and management
 - Air quality control and management
 - Management of solid and hazardous waste
 - Composition and analyses of air, wastewater and water
 - Environmental rules, regulations and ethics
 - Fundamentals of water and wastewater treatment
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Designation:

Elective