



UES 310 August 1:2

Experimental Methods in Solid Waste Management

Instructor

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Teaching Assistant

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Department: UG Program

Course Time:

Lecture venue: UG Lecture Hall

Detailed Course Page:

Announcements

Brief description of the course

The course is suited for students of environmental science/engineering program as it teaches them the principles and procedures of characterizing hazardous waste, contaminant retention and transport processes in soils.

Prerequisites

Nil

Syllabus

Solid waste characterization – Water leach test, Toxicity Characteristic Leach Procedure: Pollutant sorption capacity – Kinetics & adsorption isotherms: Pollutant transport in soils: Chemical solidification of contaminated wastes

Course outcomes

Students learn standard methods to characterize hazardous chemical wastes, how inorganic pollutants react with soils, how pollutants are transported through soils and how to minimize release of pollutants from solid waste

Grading policy

50 % mid-term, 50 % final

Assignments

1-2 per term

Resources

US EPA Publication SW-846: Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 1996.

JR Mihelcic and JB Zimmerman Environmental engineering: Fundamentals, sustainability and design. John Wiley, 2010