



Course Code CVEE-462	Course Title Waste Management	ECTS Credits 6
Department Engineering	Semester Fall, Spring	Prerequisites CVEE-260, CHEM-120
Type of Course Elective	Field Civil and Environmental Engineering	Language of Instruction English
Level of Course 1 st Cycle	Year of Study 4 th	Lecturer(s) Dr Michalis Loizides
Mode of Delivery Face-to-face	Work Placement N/A	Co-requisites None

Objectives of the Course:

The main objectives of the course are to:

- Introduce students to the different types of municipal, hazardous and industrial wastes
- Identify methods of collection, transportation, treatment, and disposal of solid, hazardous, and electronic wastes
- Emphasize on the current state regulations and laws governing waste management
- Explain recycling processes for different types of solid wastes
- Provide valuable information on how to identify hazardous wastes and indicate methods of transportation and process

Learning Outcomes:

After completion of the course students are expected to:

- Identify and discriminate among different types of solid wastes
- Identify hazardous wastes and classify those according to potential danger
- Provide waste management solutions based on the local state regulations and imposed legislature
- Apply recycling methods for different solid waste categories
- Suggest methods of collection, transportation, disposal, and storage of hazardous wastes
- Apply methods of recycling and processing of electronic wastes

Course Contents:

- Categories of wastes
- Ways to solid waste management
- History of waste management in different countries
- Regulations and laws governing waste management
- Characterization of solid wastes

- Solid waste collection
- Recycling solid wastes (paper, glass, plastic, aluminum, ferrous metals, tires, rubber, food, etc)
- Solid waste processing and material recovering facilities
- Composting municipal solid wastes
- Incineration of municipal solid wastes
- The sanitary landfill
- Identification of hazardous wastes
- Transportation of hazardous wastes
- Treatment, storage, and disposal of hazardous wastes
- Electronic wastes

Learning Activities and Teaching Methods:

Lectures, in-class examples and exercises, discussion, projects

Assessment Methods:

Homework, exams, final exam, project reports

Required Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
J. Pichtel	Waste Management Practices: Municipal, Hazardous, and Industrial	CRC Press	2005	978-0849335259

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