UNIVERSITÀ DI PAVIA

Anno Accademico 2019/2020

WASTES TREATMENT AND CONTAMINATED SITES REMEDIATION	
Enrollment year	2019/2020
Academic year	2019/2020
Regulations	DM270
Academic discipline	ICAR/03 (ENVIRONMENTAL AND HEALTH ENGINEERING)
Department	DEPARTMENT OF CIVIL ENGINEERING AND ARCHITECTURE
Course	ENVIRONMENTAL ENGINEERING
Curriculum	Impiantistico
Year of study	1°
Period	1st semester (30/09/2019 - 20/01/2020)
ECTS	6
Lesson hours	50 lesson hours
Language	Italian
Activity type	WRITTEN AND ORAL TEST
Teacher	BERTANZA GIORGIO (titolare) - 6 ECTS
Prerequisites	Sanitary Environmental Engineering (12 CFU)
Learning outcomes	This course deals with the design of waste treatment plants and contaminated sites remediation technologies
Course contents	Conventional and separate collection of municipal solid waste: different systems, design criteria. Examples. Municipal solid waste selection plants: technologies, plant schemes, mass balanes. Municipal and industrial waste incineration: gaseous emission characteristics, gas treatment technologies (conventional and advanced), design criteria, mass and energy balances. Calculation examples. Sanitary landfill: design criteria (impermeabilization, cover systems, biogas collection and recovery, leachate collecton). Contaminated site remediation technologies: design criteria.
Teaching methods	Lectures (hours/year in lecture theatre): about 25

	Practical class (hours/year in lecture theatre): about 25 Practicals / Workshops (hours/year in lecture theatre): 0
Reccomended or required readings	George Tchobanoglous, Hilary Theisen, Samuel Vigil. Integrated solid waste management: engineering principles and management issues. New York, McGraw-Hill. Additional reports and books may be suggested by the teacher during the course on particular topics.
Assessment methods	The exam consists of a written test plus an oral interview (that can be taken only if the score of the written test is sufficient).
Further information	The exam consists of a written test plus an oral interview (that can be taken only if the score of the written test is sufficient).
Sustainable development goals - Agenda 2030	$lbl_legenda_sviluppo_sostenibile