



UNIVERSITÀ DI PAVIA

Anno Accademico 2021/2022

ENVIRONMENTAL HYGIENE

Enrollment year	2021/2022
Academic year	2021/2022
Regulations	DM270
Academic discipline	MED/42 (GENERAL AND APPLIED HYGIENE)
Department	DEPARTMENT OF BIOLOGY AND BIOTECHNOLOGY "LAZZARO SPALLANZANI"
Course	EXPERIMENTAL AND APPLIED BIOLOGY
Curriculum	Bioanalisi
Year of study	1°
Period	2nd semester (01/03/2022 - 14/06/2022)
ECTS	6
Lesson hours	48 lesson hours
Language	Italian
Activity type	WRITTEN TEST
Teacher	FRONTE ALBERTO (titolare) - 3 ECTS FALSETTA GIOVANNI - 3 ECTS
Prerequisites	
Learning outcomes	
Course contents	<p>Part 1. General and Applied Hygiene. Hygiene: Definition and purposes. Health: Improvement and determinants. Etiopathogenetic models of infectious and chronic disease Epidemiology and prevention of infective disease: Sterilization and disinfection. Nosocomial infections. Epidemiology and prevention of chronic disease. Primary, secondary e tertiary prevention. Risk factors: a) environmental (air, water, soil, food); b) behavioural (nutrition, smoking, alcohol consumption, drugs abuse, physical inactivity); c) biological. Sanitary waste. Foods:chemical and physical contamination. Risk analysis and HACCP. Public health: OMS and ASL. General epidemiology: definition, purposes and sanitary</p>

indicators. Incidence and prevalence. Sources Data and collection Questionnaire.

Part 2. Environment: pollution and contamination, natural and anthropogenic sources. International conventions and national legislation. Precautionary principle. Classes and transport of pollutants in different environmental compartments. Air pollution: sources, weather variables; traffic pollutants; detection networks in air quality. Surface water and wastewater; indicators of quality and treatment. Diffusion of pollutants in the soil and subsoil. Waste management. Analytical process. Instrumental analysis. Absorption and emission atomic spectroscopy: instrumental configuration. Gas chromatography: instrumental configuration. Criteria for selection of an analytical technique. Official Methods of Analysis of the water.

Teaching methods

Reccomended or required readings

Assessment methods

Further information

Sustainable development goals - Agenda 2030

[The goals](#)