

Anno Accademico 2020/2021

MICROBIOLOGY 1	
Enrollment year	2020/2021
Academic year	2020/2021
Regulations	DM270
Academic discipline	MED/07 (MICROBIOLOGY AND CLINICAL MICROBIOLOGY)
Department	DEPARTMENT OF MOLECULAR MEDICINE
Course	BIOMEDICAL LABORATORY TECHNIQUES
Curriculum	PERCORSO COMUNE
Year of study	1°
Period	(01/03/2021 - 18/06/2021)
ECTS	2
Lesson hours	16 lesson hours
Language	Italian
Activity type	ORAL TEST
Teacher	MIGLIAVACCA ROBERTA (titolare) - 2 ECTS
Prerequisites	-
Learning outcomes	The course aims at obtaining basic microbiological knowledge (morphology, growth ability, isolation site), both for opportunistic pathogenic bacteria and for pathogenic pathogens. The main microorganisms of clinical interest and involved in the development of nosocomial infections will be treated. The student will acquire the tools to assess the importance of the pathogen in relation to the guest.
Course contents	Epidemiological aspects of infectious diseases. The bacterial cell, basic components and accessory components (bacterial sporulation). Methods of sterilization and disinfection. Normal bacterial flora. Host-parasitic interaction and pathogenesis of infectious diseases.

	 Antibiotic and Antibiotic Resistance Mechanism: In vitro antimicrobial activity evaluation (antibiogram, MIC, MBC). Methods of clinical specimens sampling, for microbiological analysis and their proper conservation. Direct and indirect diagnostic tools: microscopic, coltural; diagnostic by manual / automated and molecular systems (gene amplification, mass spectrometry), serology. General characters of bacteria of medical interest, with particular attention to staphylococci, streptococci and enterobacteria. SPECIAL MICROBIOLOGY Enterobacteria, Staphylococci, Streptococci, Pseudomonas spp., Acinetobacter spp. And Legionella spp. general characteristics pathogenic action clinical manifestations laboratory diagnosis: methods useful for identification
Teaching methods	Frontal teaching
Reccomended or required readings	"Clinical Microbiology" - for graduate courses in medicine and surgery and in health professions. Roberto Cevenini Piccin
Assessment methods	Oral examination
Further information	
Sustainable development goals - Agenda 2030	<u>\$Ibl_legenda_sviluppo_sostenibile_</u>