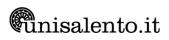
MEDICAL BIOTECHNOLOGY AND NANOBIOTECHNOLOGY (LM49)

(Lecce - Università degli Studi)

Teaching BIOANALYTICAL		Teaching in italian BIOANALYTICAL CHEMISTRY	Course year 2
CHEMISTRY		Teaching BIOANALYTICAL CHEMISTRY	Language ENGLISH
GenCod A006023		SSD code CHIM/01	Curriculum NANOBIOTECNOLOGICO
Owner professor Maria Rachele GUASCITO		Reference course MEDICAL BIOTECHNOLOGY AND	Location Lecce
		Course type Laurea Magistrale	
		Credits 6.0	Semester First Semester
		Teaching hours Front activity hours: 52.0 For enrolled in 2021/2022 Taught in 2022/2023	Exam type Oral
			Assessment Final grade
			Course timetable
			https://easyroom.unisalento.it/Orario
BRIEF COURSE - Introduction to bio-analytical chemical methods and relate DESCRIPTION - Focuses on the most important aspects in all steps of an arriadity active compounds in various biological matrices. - Instrumental methods of advanced analysis for application - Instrumental methods of advanced analysis for application - Main spectroscopic techniques for the chemical analysi - Methods for flow analysis. - Iphenate techniques: GC, LC, EC coupled with MS and SIMS. - Surface analytical techniques for bio-interface and biomate Electrochemical (bio)- sensors.		n analytical method to determine biological ions in bio-analytical chemistry. Ilysis of complex biological matrices and MS.	
REQUIREMENTS	Base knowledg	e analytical chemistry is recommended.	
COURSE AIMS	The main objectives of this course are summarized below:		
	-To apply the basic concepts of analytical chemistry to real biological systems, which are relevant in different fields, mainly human health, environmental control, food safety and biotechnology industry.		
	-To integrate the bio-recognition and the biological reactions to the analytical methodology.		
	- To use the most common techniques in chemistry to analyze, separate and identify compounds within a biological framework.		
	- To apply this k	To apply this knowledge to the resolution of bio-analytical problems.	



TEACHING METHODOLOGY	Learning methods consist of formal lectures and integrative lectures making use of slides. Outside these activities, the students are expected to read assigned papers from the scientific literature.	
ASSESSMENT TYPE	The exam is oral with a mark out of thirty. The test also includes the discussion of the reports produced by the students relating to their practical laboratory activities.	
REFERENCE TEXT BOOKS	 Bioanalytical Chemistry By: Susan R. Mikkelsen, Eduardo Cortón Publisher: Wiley-Blackwell Print ISBN: 9781118302545, 1118302540 eText ISBN: 9781119057741, 1119057744 Edition: 2nd 	
	1. Bioanalytical Chemistry By: Andreas Manz; Nicole Pamme; Dimitri Iossifidis	

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