## **MEDICAL BIOTECHNOLOGY AND NANOBIOTECHNOLOGY (LM49)**

(Lecce - Università degli Studi)

Teaching CELLULAR	<b>Teaching in italian</b> CELLULAR BIOTECHNOLOGIES	Course year 1
DIOTECHNOLOGIES	Teaching CELLULAR BIOTECHNOLOGIE	ES Language INGLESE
GenCod A004552	SSD code BIO/13	Curriculum PERCORSO GENERICO/COMUNE
Owner professor Cecilia BUCCI	<b>Reference course</b> MEDICAL BIOTECHNOLOGY AND	
	Course type Laurea Magistrale	Location Lecce
	Credits 9.0	Semester Primo-Semestre
	Teaching hours Ore-Attivita-frontale:	Exam type Orale
	74.0	Assessment Voto-Finale
	For enrolled in 2018/2019	Course timetable
	Taught in 2018/2019	https://easyroom.unisalento.it/Orario
DESCRIPTION	in cultured animal cells. Cellular and molecular biotechnologies to identify protein-protein interactions: the two-hybrid system and its variants, the phage display. Biology of stem cells: embryonic, foetal and adult. Applications of stem cells. Induced pluripotent stem cells. Regenerative medicine. Gene therapy: vectors, methodologies and scopes. Cloning and therapeutical cloning. <b>Program of pratical laboratory classes:</b> Transfection of mammalian cells. Use of GFP to monitor transfection efficiency. Transfection of GFP-tagged proteins to establish their intracellular localization in mammalian cells. Immunofluorescence analysis. Differentiation of cultured mammalian cells.	
REQUIREMENTS	No formal prerequisites are required. However, a solid knowledge of cell biology, molecular biology and genetics will be helpful to follow the course with profit.	
TEACHING METHODOLOGY	Formal lectures (8 cfu= 64 hours) making use of slides and hypertext links to specific Web sites and pratical laboratory classes (1 cfu = 10 hours). Outside these activities, the students are expected to read assigned papers from scientific literature.	
ASSESSMENT TYPE	The evaluation of the oral examination will be based on the level of the theoretical knowledge and practical abilities acquired through the description of topics and methodologies (70%), on the critical and problems solving abilities and (20%) and on communication skills (10%).	

