

MA105] ADVANCED TECHNIQUES IN TISSUE ENGINEERING AND REGENERATIVE MEDICINE

GENERAL INFORMATION

Studies	MASTER'S DEGREE IN BIOMEDICAL TECHNOLOGIES		Subject	?	
Semester	1	Course	1	Mention / Field of specialisation	???
Character	OPTIONAL		Language	ENGLISH	
Plan	2023	Modality	Face-to-face	Total hours	46.5 class hours + 28.5 non-class hours = 75 total hours
Credits	3	Hours/week	2.58		

PROFESSORS

ZABALA EGUREN, ALAITZ
 BURUAGA LAMARAIN, LOREA

REQUIRED PREVIOUS KNOWLEDGE

Subjects	Knowledge
FUNDAMENTALS OF MEDICINE AND BIOMATERIALS	(No previous knowledge required)

LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
MMRA26 - To apply the knowledge acquired and your problem-solving skills in new, little-known or changing environments within broader (or multidisciplinary) contexts related to your area of study		x		0,72
MMRA28 - To communicate your conclusions and the knowledge and ultimate reasons that support them to specialized and non-specialized audiences in a clear and unambiguous way		x		0,18
MM18-2 - Understanding the techniques and uses of tissue engineering and regenerative medicine in accordance with the professional codes and ethics of engineering			x	2,1
			Total:	3

KC: Knowledge or Content / SK: Skills / AB: Abilities

CONTENTS

- L1-Surface modification of polymers
- L2-Characterization Techniques
- L3-Bioreactors for tissue Engineering
- P2- Practical sessions on hybridized 3D printing+electrospinning technology
- M1- Master class on industrial experiences regarding tissue Engineering technology
- M2- Master class on medicine regenerative experiences in Osakidetza

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources	Bibliography
Subject notes	Zink M: in &Thin films and coatings in biology&; (ed. Nazarpour S), 11&;67; 2013, Dordrecht, Netherlands, Springer.
Technical articles	https://doi.org/10.2174/156802608783790893
Presentations by external Lecturers	
Lab practical training	
Video projections	