Course code	**BUM104**				
Course title	**TISSUE ENGINEERING**				
General information					
Study programme	Graduate study „ Biotechnology in medicine“			Academic year	
Lecturer	Doc. Dr. Sc. Kristina Grabušić				
Status		**Required**		Elective	
ECTS system					**6**
Course objectives					
Upon completion of this course students should be able understand and apply the principles of cell separation, cell modification (including genetic modifications), tissue engineering, manufacturing of clinical–grade cell and tissue products and select applications in cellular immunotherapy, blood and marrow transplantation, stem cells, progenitors and regenerative medicine.					
Course description					
Introduction to cell and tissue engineering; Cell therapy and biotechnology; Cell isolation; Cell modification; Stem cells and progenitors; Tissue dimensionality and tissue matrices; Bioreactors for manufacuring and organ susbstitution; cGMP manufacturing of cells and tissues; Cellular immunotherapy; Advanced cell replacement therapy; Tissue remodelling and wound healing; Introduction to clinical trial design.					
Learning outcomes					
See “Course Objectives”					