

Course title Wykład monograficzny - Biotechnologia medyczna/ Monographic lecture - Medical biotechnology		ECTS code 13.4.0108	
Name of unit administrating study Faculty of Chemistry			
Studies			
Field of study	Type	Form	
Chemistry	Masters	Full-time studies	
Teaching staff Dr hab. Agnieszka Żylicz-Stachula, prof. nadzw.			
Forms of classes, the realization and number of hours		ECTS credits 3	
A. Forms of classes, in accordance with the UG Rector's regulations lecture		classes - 30 h tutorial classes – 15 h student's own work – 30 h	
B. The realization of activities in-class learning		Total: 75 h - 3 ECTS	
C. Number of hours 30 h lecture			
The academic cycle Second year, summer semester			
Type of course obligatory		Language of instruction Polish	
Teaching methods <ul style="list-style-type: none"> • Lecture with multimedia presentation • Problem-based Learning • Individual consultation • Individual student's work 		Form and method of assessment and basic criteria for evaluation or examination requirements	
		A. Final evaluation, in accordance with the UG study regulations course completion (with a grade)	
		B. Assessment methods presentation, written test	
		C. The basic criteria for evaluation or exam requirements Lecture: knowledge of the issues discussed during the lecture	
Required courses and introductory requirements None			
Aims of education Presenting all the issues mentioned in the course contents.			
Course contents applications of stem cells in medical biotechnology; tissue engineering and regenerative medicine; production of bioscaffolds and new biomaterials; proteomics as a tool to identify new therapeutic goals; pharmacogenetics and pharmacogenomics; recombinant vaccines; examples of gene therapy; applications of antibodies in biotechnology and immunotherapy; perspectives of medical biotechnology, ethical controversies.			
Bibliography of literature			
A. Literature required to pass the course Monographic works provided by assistants leading classes			
B. Extracurricular readings			
Knowledge			
Student knows and characterizes current possibilities, limitations, perspectives and the anticipated trends in medical biotechnology. Student gives examples of applications of the recombinant nucleic acids and proteins in medical biotechnology. Student is familiar with medical biotechnology legislation.			

Skills

Student discusses issues related to the course content (in a correct and understandable way, in speech and in writing).

Social competence

Student recognizes the important role and broad spectrum of issues related to modern medical biotechnology.
Student understands the need for further curiosity and education in this area.