

<b>Course title</b> Wykład monograficzny - Biotechnologia medyczna/ Monographic lecture - Medical biotechnology		<b>ECTS code</b> 13.4.0108	
<b>Name of unit administrating study</b> Faculty of Chemistry			
<b>Studies</b>			
<b>Field of study</b>	<b>Type</b>	<b>Form</b>	
Chemistry	Masters	Full-time studies	
<b>Teaching staff</b> Dr hab. Agnieszka Żylicz-Stachula, prof. nadzw.			
<b>Forms of classes, the realization and number of hours</b>		<b>ECTS credits</b> 3	
<b>A. Forms of classes, in accordance with the UG Rector's regulations</b> lecture		classes - 30 h tutorial classes – 15 h student's own work – 30 h	
<b>B. The realization of activities</b> in-class learning		Total: 75 h - 3 ECTS	
<b>C. Number of hours</b> 30 h lecture			
<b>The academic cycle</b> 2020/21 summer semester			
<b>Type of course</b> obligatory		<b>Language of instruction</b> Polish	
<b>Teaching methods</b> <ul style="list-style-type: none"> <li>• Lecture with multimedia presentation</li> <li>• Problem-based Learning</li> <li>• Individual consultation</li> <li>• Individual student's work</li> </ul>		<b>Form and method of assessment and basic criteria for evaluation or examination requirements</b>	
		<b>A. Final evaluation, in accordance with the UG study regulations</b> course completion (with a grade)	
		<b>B. Assessment methods</b> presentation, written test	
		<b>C. The basic criteria for evaluation or exam requirements</b>  Lecture: knowledge of the issues discussed during the lecture	
<b>Required courses and introductory requirements</b> None			
<b>Aims of education</b> Presenting all the issues mentioned in the course contents.			
<b>Course contents</b>  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.			
<b>Bibliography of literature</b>			
<b>A. Literature required to pass the course</b> Monographic works provided by assistants leading classes			
<b>B. Extracurricular readings</b>			
<b>Knowledge</b>			
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.