

Nazwa zajęć/ <i>Course title:</i>	Podstawy immunopatologii	ECTS	4
Nazwa zajęć w j. angielskim/ <i>Course title in English:</i>	Fundamentals of immunopathology		
Zajęcia dla kierunku studiów/ <i>Degree program name:</i>	Biotechnology		

Język kursu/ <i>Course language:</i>		English		Poziom studiów/ <i>Study level:</i>		I	
Typ studiów/ <i>Form of studies:</i>	x intramural .. extramural	Status zajęć/ <i>Course status</i>	podstawowe/ <i>Basic</i> x kierunkowe/ <i>major</i>	obowiązkowe/ <i>mandatory</i> X do wyboru/ <i>elective</i>	Semestr/ <i>Semester:</i>	6 semestr zimowy/ <i>winter semester</i> x semestr letni/ <i>summer semester</i>	
Rok akademicki/ <i>Academic year:</i>				2022/2023	Numer katalogowy/ <i>Catalogue number:</i>	BBT_BTa-1S-6L-47_4	

Koordinator zajęć/ <i>Course coordinator:</i>	dr Magdalena Żmigrodzka			
Prowadzący zajęcia/ <i>Teachers responsible for the course:</i>	dr Magdalena Żmigrodzka and invited specialists			
Założenia, cele i opis zajęć/ <i>Aims, objectives and description of the course:</i>	<p>Lectures:</p> <ol style="list-style-type: none"> 1. Classification of hypersensitivity. Mechanisms of the development of hypersensitivity and autoimmune diseases. 2. Selected diseases from hypersensitivity in animals. 3. Selected autoimmune diseases in animals. 4. Pharmacotherapy of diseases of the immune background. 5. Drug registration rules. <p>The exercises are a practical supplement to the lectures:</p> <ol style="list-style-type: none"> 1. Fever. Acute phase reactions in inflammation. 2. Haemolytic diseases. 3. Monthly blindness of horses. 4. Diseases of the immune background skin. 5. Food allergies and contact hypersensitivity. 			
Formy dydaktyczne, liczba godzin/ <i>Teaching forms, number of hours:</i>	<p>a) Lectures: number of hours 15; b) Laboratory classes: number of hours 30;</p>			
Metody dydaktyczne/ <i>Teaching methods:</i>	lectures, exercises, discussions, consultations, students' own work; In necessary cases (e.g. pandemic) possibility of distance education.			
Wymagania formalne i założenia wstępne/ <i>Formal requirements and prerequisites</i>	General immunology at the basic level; The student has a basic knowledge of the mechanisms of innate and acquired immunity.			
Efekty uczenia się/ <i>Learning outcomes:</i>	treść efektu przypisanego do zajęć/ <i>the content of the effect assigned to the course:</i>		Odniesienie do efektu kierunkowego <i>/Relation to the course outcomes</i>	Siła dla ef. kier* <i>/Impact on the course outcomes*</i>
Wiedza (absolwent zna i rozumie) <i>/Knowledge: (the graduate knows and understands)</i>	W1	has knowledge of the mechanisms of hypersensitivity and autoimmunity	K_W10	2
	W2	has knowledge of the selection of techniques to study immunopathological mechanisms	K_W07	2
Umiejętności (absolwent potrafi) <i>/Skills: (the graduate is able to)</i>	U1	has the ability to search for and use the necessary information from various sources and use them creatively to achieve the set goal	K_U04 K_U19 K_U22	2 2 2
	U2	is aware of the social importance of improving diagnostic and therapeutic methods in clinical immunology and knows the methods used for this purpose	K_U01 K_U04	2 2
	U3	understands the need to constantly expand and deepen knowledge, knows its practical use	K_U04 K_U22	2 2
Kompetencje (absolwent jest gotów do) <i>/Competences: (The graduate is ready to)</i>	K1			
Treści programowe zapewniające uzyskanie efektów uczenia się: <i>/Program contents ensuring the</i>	To familiarize students with the principles of regulating the basic mechanisms of innate and acquired immunity, including excessive or incorrect response, which results in the development of hypersensitivity and autoimmune diseases. Acquainting with the methods used in research on the pathogenesis of diseases			

<i>achievement of the learning outcomes:</i>	
Sposób weryfikacji efektów uczenia się/ <i>Methods of the verification of the learning outcomes:</i>	Assessment of the preparation for classes based on the material realized and activity during the discussion of a defined problem. Written final credit. Entry into the eHMS system. In necessary cases (e.g. pandemic), it is possible to pass it remotely.
Szczegóły dotyczące sposobów weryfikacji i form dokumentacji osiągniętych efektów uczenia się <i>/Details on the verification methods and of the ways of documenting the learning outcomes:</i>	Final test in the form of short answers to 5 questions, entry into the eHMS system. In necessary cases (e.g. pandemic) possibility of distance education.
Elementy i wagi mające wpływ na ocenę końcową/ <i>Elements and weights influencing the final grade:</i>	The assessment of the learning outcomes consists of: 1 - assessment of the final test of the material covered, 2 - assessment of the student's activity during the exercises. You can get a maximum of 100 points for each item. Weight of each element: 1 - 75%, 2 - 25%. The condition for completing the course is obtaining min. 51% (51 points). The final grade is calculated as the sum of the points obtained for each item (including their weight). The condition for passing the course is to obtain a minimum of 51% of points including all elements.
Miejsce realizacji zajęć/ <i>Teaching place:</i>	University-wide teaching rooms; MS Teams
<i>Literature / Literature:</i> Immunologia pod red. Jakub Gołąb, PWN, 2008 Immunologia, David Male, Jonathan Brostoff, David B. Roth, Ivan Roitt, Elsevier Urban & Partner, 2008 Veterinary Immunology I. Tizard, Saunders, 2009 Immunologia kliniczna psów i kotów, M.Day, Galaktyka, 2011.	
UWAGI/ANNOTATIONS The following scale is used to calculate the final score: 100-91% points - 5.0 90-81% points - 4.5 80-71% points - 4.0 70-61% points - 3.5 60-51% points - 3.0	

*) 3 – zaawansowany i szczegółowy, 2 – znaczący, 1 – podstawowy/ 3 – significant and detailed, 2 – considerable, 1 – basic,

Wskaźniki ilościowe charakteryzujące moduł/przedmiot/*Quantitative summary of the course:*

Szacunkowa sumaryczna liczba godzin pracy studenta (kontaktowych i pracy własnej) niezbędna dla osiągnięcia zakładanych dla zajęć efektów uczenia się - na tej podstawie należy wypełnić pole ECTS / <i>Estimated number of work hours per student (contact and self-study) essential to achieve the presumed learning outcomes - basis for the calculation of ECTS credits:</i>	107 h
Łączna liczba punktów ECTS, którą student uzyskuje na zajęciach wymagających bezpośredniego udziału nauczycieli akademickich lub innych osób prowadzących zajęcia/ <i>Total number of ECTS credits accumulated by the student during contact learning:</i>	1.8 ECTS