					Syllab	us 201	19/202	0							
				De	escript	ion of	the cou	ırse							====
Module/Course			Dia	Diagnostic of hypersensitivity						Group of detailed education				on	
			rea	ctions	(alle	rgic ar	nd auto	oim	mu	ne	resu	ults	,		
			dis	eases)							Group		Group name		
											cod	e C	Preci	inical	
													Scien	ices	
Faculty			Me	dicine											
Major			me	medicine											
Specialties			Not	applic	able										
Level of studies			Uni	form n	nagist	er stud	ies X *								
			1 st (degree	studie	es 🗆									
			2 nd	degree	studi	es 🗆									
			3 rd	degree	studi	es 🗆									
			pos	postgraduate studies □											
Form of studies			X f	ull-tim	e 🗆	part-ti	ime								
Year of studies			111-1	V					Sen	neste	r	x Wint	er		
												x Sum	mer		
Type of course			□ 0	□ obligatory											
			□li	☐ limited choice											
			X fr	X free choice / elective											
Course			□n	□ major x basic											
Language of instruction			□P	□ Polish X English □ other											
* mark 🗆 with an 🛚	X														
							f hours								
					Forn	n of ed	ucation) 				1		E	
Unit teaching the course	Lectures (L)	Seminars (SE)	Auditorium classes (AC)	Major Classes ~ not clinical (MC)	Clinical Classes (CC)	Laboratory Classes (LC)	Classes in Simulated Conditions (CSC)	Practical Classes with Patient	(PCP)	Specialist Classes – magister studies (SCM)	Foreign language Course (FLC)	Physical Education obligatory (PE)	Vocational Practice (VP)	Self-Study (Student's own work)	E-learning (EL)
Winter Semester								-				111			
Chair of Clinical Immunology				30											
Summer Semester															
Chair of Clinical Immunology				30											
TOTAL per year:															
Chair of Clinical Immunology				60											



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Educational objectives (max. 6 items)

C1. After completion of this course the students should understand the current diagnostic methods as well as emerging therapies of immune-mediated diseases related to the hypersensitivity reactions type I-IV by Gell and Coombs, that will find clinical application in various medical specialties in the near future. The course will be focused on approaches which are currently elaborated in research laboratories and/ or are in the clinical trials.

Education result matrix for module/course in relation to verification methods of the intended education result and the type of class

Number of course education result	Number of major education result	Student who completes the module/course knows/is able to	Methods of verification of intended education results (forming and summarizing)	Form of didactic class **enter the abbreviation
K 01	CW22	Describes the pathomechanisms of hypersensitivity-mediated diseases	Credit test	MC
S 01	CU8	Indicate the assays useful in the immune- mediated disease assessment. Perform sin tests. Correctly interpret results of the skin tests used in the diagnosis of allergy	Observe and perform selected tests	MC

^{**} L - lecture; SE - seminar; AC - auditorium classes; MC - major classes (non-clinical); CC - clinical classes; LC - laboratory classes; SCM - specialist classes (magister studies); CSC - classes in simulated conditions; FLC - foreign language course; PCP practical classes with patient; PE - physical education (obligatory); VP - vocational practice; SS - self-study, EL - E-learning.

Please mark on scale 1-5 how the above effects place your classes in the following categories: communication of knowledge, skills or forming attitudes:

Knowledge: 5

Skills: 4

Social competences: 4

Student's amount of work (balance of ECTS points)

Student's workload	Student Workload (h)
(class participation, activity, preparation, etc.)	
1. Contact hours:	30
2. Student's own work (self-study):	9
Total student's workload	39
ECTS points for module/course	1,5
Comments	

Content of classes (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)

Practical classes

- 1. An overview of recent reports in immunology the mechanisms of resistance and tolerance
- 2. Antibodies based diagnostics.
- 3. Cell isolation and identification. Flow cytometry, cell sorting systems, cell culturing methods.
- 4. Hypersensitivity reactions diagnostics in vivo. Allergen provocation tests.
- 5. Written test

Basic literature (list according to importance, no more than 3 items)

- Immunology, 8th Edition, Elsevier, 2013
 Authors: David Male, Jonathan Brostoff, David Roth & Ivan Roitt
- 2. K. Abbas, A. H. Lichtman, S. Pillai: "Cellular and Molecular Immunology", 6th Edition, Elsevier, 2012.

 Peakman M., Vergani D.: "Basic and Clinical Immunology". Second edition. Elsevier – Churchill Livingstone, 2009Nature reviews. Immunology. Nature New York, London

Additional literature and other materials (no more than 3 items)

- 1. Nature reviews. Immunology. Nature New York, London
- 2. Allergy: European Journal of Allergy and Clinical Immunology. Wiley Blackwell Journal of Allergy and Clinical Immunology. Elsevier.

Didactic resources requirements (e.g. laboratory, multimedia projector, other...)

- multimedia projector, computers, boards, pointers.

Laboratory, centrifuges, Light microscopes, fluorescent microscopes, lab dishes, lymphocyte isolation kits, surface antigen staining kits, autoantibody detection kits, immunohistochemistry kits, lab consumables.

Preliminary conditions (minimum requirements to be met by the student before starting the module/course)

Credited courses: Anatomy, Histology with Cytology, Physiology (years I and II) on the level of 3rd year ED students requirements.

Conditions to receive credit for the course (specify the form, criteria and conditions of receiving credit for classes included in the module/course, admission terms to final theoretical or practical examination, its form and requirements to be med by the student to pass it and criteria for specific grades).

Each absence must be made up, including rector's days or dean's hours.

Self-performation, read-out and interpretation of skin test and laboratory tests. Activity during discussions. Attendance at classes. Fulfilment of written final single-choice test (15 questions) Absence crediting possible maximally for 2 classess. Absence crediting possible during consultation hours with presenting teacher during course schedule.

In case of rector's/deans hours/days student is obliged to prepare presentation on a specified topic (after consultation with the teacher)

Grade:	Criteria for course
Very Good (5.0)	15points (100%)
Good Plus (4.5)	13-14points (86,6-93,3%)
Good (4.0)	11-12 points (73,3-80%)
Satisfactory Plus (3.5)	10 points (66,6%)
Satisfactory (3.0)	9 points (60%)

Grade:	Criteria for exam (if applicable)
Very Good (5.0)	
Good Plus (4.5)	
Good (4.0)	
Satisfactory Plus (3.5)	
Satisfactory (3.0)	

Name of unit teaching course:	Chair of Clinical Immunology
Address	Ul Chałubińskiego 5, 50-368 Wrocław
Phone	717841740
E-mail	Agnieszka. czerniawska@umed.wroc.pl

Person responsible for course:	Prof. Dr hab Marek Jutel
Phone	7177841740
E-mail	Marek.jutel@umed.wroc.pl

List of persons conducting specific classes:	degree/scientific or professional title	Discipline	Performer profession	Form of classes
Pawel Gajdanowicz	Ph.D	Medical biology	adiunct	classes
Ewa Wyrodek	Ph.D	Medical biology	lectruer	classes
Anna Kosowska	MD	Medicine	asistent	cassess
Magdalena Zemelka- Wiącek	Ph.D	Medical Biology	adiunct	classess
Marek Jutel	Prof. Dr hab.	Medicine	director	classes

Syllabus developed by

Date of Syllabus development

12,06,2019

Uniwersytet Medyczny we Wrocławiu KATEDRA I ZAKŁAD IMMUNOLOGII KLINICZNEJ adiunkt dydaktyczny da. Studentów Zagranicznych

dr Paweł Gajdanowicz Course Coordinator for the ED Students Department of Clinical Immunology.

Signature of Head of teaching unit

ersytet Medyczny we Wrocławiu KATEDRA I ZAKŁAD IMMUNOLOGII KLINICZNEJ Kięrownik

prof. dr hab. ed. Warek Jutel

Signature of Faculty Deals Medical University
FACULTY OF MEDICINA
VICE-DEAN EXTRUDIPE IN EN

Prof. Andrzej Hendrich, PhD

JSH