

Syllabus 2017/2018														
Description of the course														
Module/Course	Clinical Pharmacology										Group of detailed education results			
											Group code E	Group name NONSURGICAL TREATMENT		
Faculty	Medicine													
Major	medicine													
Specialties	Not applicable													
Level of studies	Uniform magister studies x* 1 st degree studies <input type="checkbox"/> 2 nd degree studies <input type="checkbox"/> 3 rd degree studies <input type="checkbox"/> postgraduate studies <input type="checkbox"/>													
Form of studies	x full-time x part-time													
Year of studies	IV					Semester		<input type="checkbox"/> Winter <input checked="" type="checkbox"/> Summer						
Type of course	x obligatory <input type="checkbox"/> limited choice <input type="checkbox"/> free choice / elective													
Course	x major <input type="checkbox"/> basic													
Language of instruction	<input type="checkbox"/> Polish x English <input type="checkbox"/> other													
* mark <input type="checkbox"/> with an X														
Number of hours														
Form of education														
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														
Summer Semester														
				15										
TOTAL per year: 15														



				15											

Educational objectives (max. 6 items)
Familiarize students with the practical dimension:

C1. risks associated with the applied drug therapy and methods of enhancing its efficacy and safety, including the rationalization of analgesic therapy and antibiotic therapy,

C2. interpretation of information materials for medicines,

C3. clinical and economic evaluation of health technologies.

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 <i>**enter the abbreviation</i>
W 1	E.W 8	Knows and understands the course and symptoms of the aging process and the principles of comprehensive geriatric assessment and multidisciplinary care in relation to an elderly patient.	Summary test with 5 open questions	MC,SS
W 2	E.W 10	Knows and understands the basic principles of pharmacotherapy of diseases in the elderly.		
W 3	E.W 29	Knows the principles of treatment of pain, including cancer pain and chronic pain.		
W 4	E.W 40	Lists the indications for the implementation of the therapeutic drug monitoring.		
W 5	E.W 41	Defines the basic concepts of pharmacoeconomic.		
U 1	E.U 17	Analyzes the possible adverse effects of individual drugs and the interactions between them.		
U 2	E.U 18	Proposed individualization of existing guidelines and other therapeutic treatments to ineffectiveness or contraindications to standard therapy.		MC, SS
U 3	E.U 19	Recognizes the symptoms of drug dependence and proposes therapeutic treatment.		
U 4	E.U 31	Interprets characteristics of pharmaceutical medicines and		

		critically evaluate advertising relating to drugs.		
<p>** 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 .</p>				
<p>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: 5</p>				
Student's amount of work (balance of ECTS points)				
Student's workload (class participation, activity, preparation, etc.)			Student Workload (h)	
1. Contact hours:			15	
2. Student's own work (self-study):			7,5	
Total student's workload			22,5	
ECTS points for module/course			1	
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)				
Lectures				
Classes				
<ol style="list-style-type: none"> 1. Adverse drug effects, with particular emphasis on adverse consequences of drug interactions important in medical practice. Pharmacovigilance. 2. Individualization of pharmacotherapy in children and the elderly. 3. Optimization of pharmacotherapy based on genetic testing. 4. Optimization of pharmacotherapy during pregnancy. 5. Pathopharmacokinetics. Drug dosage adjustment in kidney failure. 6. The influence of environmental factors and circadian rhythm to the drugs. 7. Effective and safe pharmacotherapy of pain. 8. Rational antibiotic therapy. 9. Therapeutic drug monitoring. Individualization of drug therapy. 10. Pharmacoeconomics aspects of treatment. 11. The interpretation of the characteristics of pharmaceutical medicines and critical evaluation of promotional materials for the drug. 12. Conducting clinical trials in accordance with the principles of GCP. Ethical aspects of clinical trials of new drugs and placebo. Interpretation of clinical protocols I, II, III, IV trials. Planning a clinical trial. 13. EBM in pharmacotherapy. 14. Compliance with treatment recommendations. 				
Practical classes				
Basic literature (list according to importance, no more than 3 items)				
<ol style="list-style-type: none"> 1. Katzung B.G., Trevor A.J.: Basic&clinical pharmacology. Mc Graw Hill Education, 2016. 2. Müller M.: Clinical pharmacology: current topics and case studies. Springer International Publishing, 2016. 3. Brody T.: Clinical Trials : Study Design, Endpoints and Biomarkers, Drug Safety, and FDA and ICH Guidelines. Elsevier Science Publishing Co Inc, 2016. 				
Additional literature and other materials (no more than 3 items)				
<ol style="list-style-type: none"> 1. Altman R.B., Flockhart D., Goldstein D.B.: Principles of pharmacogenetics and 				



<p>pharmacogenomics. Cambridge University Press, 2012.</p> <p>2. Bennett P.N., Brown M.J., Sharma P.: Clinical pharmacology. Churchill Livingstone Elsevier, 2012.</p> <p>3. Murphy J. E.: Clinical Pharmacokinetics. American Society of Health-System Pharmacists, 2016.</p>	
<p>Didactic resources requirements (e.g. laboratory, multimedia projector, other...) seminar room, therapeutic drug monitoring laboratory, multimedia projector</p>	
<p>Preliminary conditions (minimum requirements to be met by the student before starting the module/course) Pass the exam "Pharmacology and toxicology"</p>	
<p>Conditions to receive credit for the course (specify the form 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 met by the student to pass it and criteria for specific grades)</p> <p>The basis for passing is attendance and to obtain a positive mark (at least 65%) from written test (5 open questions). Students prepares for passing on the basis of knowledge from classes, literature and self-study.</p>	
Grade:	Criteria (only for courses/modules ending with an examination)
Very Good (5.0)	
Good Plus (4.5)	
Good (4.0)	
Satisfactory Plus (3.5)	
Satisfactory (3.0)	

Name and address of module/course teaching unit, contact: telephone and e-mail address

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Coordinator / Person responsible for module/course, contact: telephone and e-mail address

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List of persons conducting specific classes: full name, degree/scientific or professional title, discipline, performed profession, form of classes.

Anna Wiela-Hojeńska, prof. dr hab., clinical pharmacology, clinical pharmacy, academic teacher, MC
 Przemysław Niewiński, PhD, clinical pharmacology, anaesthesiology, academic teacher, MC
 Paweł Petryszyn, PhD, clinical pharmacology, gastroenterology, academic teacher, MC
 Piotr Milejski, dr hab., clinical pharmacology, clinical pharmacy, academic teacher, MC
 Magdalena Hurkacz, PhD, clinical pharmacology, clinical pharmacy, academic teacher, MC
 Beata Sienkiewicz Msc, clinical pharmacy, PhD student, MC
 Justyna Suwała Msc, clinical pharmacy, PhD student, MC

Date of Syllabus development

4.07.2017

Syllabus developed by

Prof. dr hab. Anna Wiela-Hojeńska
 Dr Magdalena Hurkacz

Signature of Head of teaching unit

Signature of Faculty Dean


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Wrocław Medical University
 FACULTY OF MEDICINE
 VICE-DEAN FOR STUDIES IN ENGLISH

 Prof. Andrzej Hendrich, PhD

Uniwersytet Medyczny we Wrocławiu
 KATEDRA I ZAKŁAD
 FARMAKOLOGII KLINICZNEJ
 Kierownik

 prof. dr hab. Anna Wiela-Hojeńska

Uniwersytet Medyczny im. Piastów Śląskich we Wrocławiu Dziekanat Wydziału Lekarskiego ENGLISH DIVISION	
Wpłynęło dnia	11-07-2017
L.dz. DL/ED/	
Znak sprawy DL/ED-	