

Subject name Clinical Pharmacology	ECTS Code																
Name of unit teaching the subject THE ZBIGNIEW RELIGA FACULTY OF MEDICAL SCIENCES IN ZABRZE, THE UNIVERSITY OF TECHNOLOGY IN KATOWICE																	
Studies <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 20%;">Field of study</th> <th style="width: 20%;">degree</th> <th style="width: 20%;">mode</th> <th style="width: 20%;">major</th> <th style="width: 20%;">specialization</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">medical</td> <td style="text-align: center;">Uniform Master's</td> <td style="text-align: center;">Stationary/non-stationary</td> <td></td> <td></td> </tr> </tbody> </table>		Field of study	degree	mode	major	specialization	medical	Uniform Master's	Stationary/non-stationary								
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Surname of instructor (instructors)																	
Type of class, method of implementation and specified number of hours	Amount of ECTS points																
A.Type of class <ul style="list-style-type: none"> • lecture, • exercise classes, • discussion • practical exercises with problem solvin • project <p>* mark where applicable</p>	Description of awarding ECTS points: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 70%;">Activity</th> <th style="width: 30%;">Student workload</th> </tr> </thead> <tbody> <tr> <td>Participation in lectures</td> <td style="text-align: center;">- hours</td> </tr> <tr> <td>Participation in practical classes</td> <td style="text-align: center;">15 hours</td> </tr> <tr> <td>Preparation for practical classes and colloquiums</td> <td style="text-align: center;">5 hours</td> </tr> <tr> <td>Examination preparation</td> <td style="text-align: center;">10 hours</td> </tr> <tr> <td>Consultations</td> <td style="text-align: center;">5 hours</td> </tr> <tr> <td>Total number of hours</td> <td style="text-align: center;">35 hours / 30</td> </tr> <tr> <td>Amount of ECTS points per module</td> <td style="text-align: center;">1ETCS</td> </tr> </tbody> </table>	Activity	Student workload	Participation in lectures	- hours	Participation in practical classes	15 hours	Preparation for practical classes and colloquiums	5 hours	Examination preparation	10 hours	Consultations	5 hours	Total number of hours	35 hours / 30	Amount of ECTS points per module	1ETCS
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B.Method of implementation <ul style="list-style-type: none"> • classes in a didactic room • on-line classes/<i>blended learning</i> • classes outside the didactic room (in this case must specify where they are held) 																	
C. Amount of hours in accordance with the approved curriculum 15h of exercise classes																	
Didactic cycle 7 th semester																	
Subject status <ul style="list-style-type: none"> • mandatory / facultative 	Language of instruction Polish Overview of medical databases in English																
Didactic methods Lectures Tests, Reports, Demonstrations, presentations	Forms and methods of passing and general grading criteria or examination requirements <hr style="border-top: 1px dashed black;"/> A. Method of passing <ul style="list-style-type: none"> • examination <hr style="border-top: 1px dashed black;"/> B. Forms of passing: <ul style="list-style-type: none"> • test • scientific presentations <hr style="border-top: 1px dashed black;"/> C. Basic grading criteria Requirements are individually specified and correspond to the educational effects																

Definition of preparatory subjects and initial requirements

Familiarity with anatomy, biochemistry, physiology, microbiology, pharmacology and toxicology, and propedeutics of internal medicine

Subject aim

1. The aim of the learning process is to acquire knowledge about drugs and their use for pathological conditions with particular emphasis on organ failure and during pregnancy
2. Becoming familiar with principles of conducting clinical examinations and principles of GCP
3. The aim of the subject "Clinical Pharmacology" is also to prepare the students to acquire practical abilities of performing simple pharmaco-economic calculations
4. During the course students also become familiar with the principles of using pharmacological manuals and databases on technical products
5. The students also become familiar with the recommendations and principles of individualization of monitored therapy, therapy of the elderly and principles of palliative care and treating pain in terminal conditions.

Curriculum**Exercise classes**

Exercise class topics

1. Monitored therapy, individualization of therapy
2. Geriatric therapy – principles, limitations, geriatric assessment
3. Principles of conducting clinical examinations. Principles of GCP
4. Basic pharmacological terminology and calculations
5. Treating chronic pain, and treatment of postoperative and cancer pain. Terminal patient – futile therapy
6. Principles of rational antibiotic therapy as well as antibiotic prophylaxis
7. Practical multimedia classes – Advertising in medicine
8. Supplements and OTC drugs – legal and ethical conditions of their use
9. Overview of Pub med medical databases – preparing a short scientific topic
10. Presentations of topics prepared by the students

Literature**A. Basic literature:**

1. Korbut R. (ed.) – Farmakologia, Warszawa, 2017 PZWL (2nd edition)
2. InternaSzczeklika 2019, MedycynaPraktyczna
3. Orzechowska – Juzwenko, K., Farmakologia Kliniczna – Znaczenie w praktyce medycznej. WM Górnicki – 2006
4. Maciejczyk A., Kruk M.: **Bezpieczeństwo farmakoterapii, Medipage, Warszawa 2017**

B. Supplementary literature

1. Brodniewicz T.: Badania Kliniczne, CeDeWu, Warszawa 2015

Educational effects:

Effect no	Description of an educational effect Number of educational effects	Form of grade Form of didactic classes
Knowledge:		
W1	E.W10	Written test examination Presentation, oral response, Practical solving of pharmaco-economic problems Discussion and solving of clinical problems in groups NE (Non-clinical exercises)
W2	Knows the basic principles of pharmacotherapy of the elderly	
W3	E.W28	
W4	Knows the principles of palliative treatment of a terminally ill patient	
W5	E.W29	
	Knows the principles of treating pain, including cancer and chronic pain	
	E.W42	

	Knows the recommendations to implement monitored therapy E.W43 Knows basic pharmaco-economic terminology	SE – self-education
Abilities:		
U1 U2	E.U17 Can conduct an analysis of possible harmful side effects of individual drugs and the interactions between them E.U18 Suggests an individual approach to the therapeutic guidelines in force as well as other treatment methods in face of an unsuccessful or contradictive standard therapy E.U19 Diagnoses the symptoms of drug dependence and suggest treatment E.U31 Interpret the pharmaceutical characteristics of medicinal products and critically assess advertising materials which deal with drugs	Written test examination Presentation, oral response, Practical solving of pharmaco-economic problems Discussion and solving of clinical problems in groups NE (Non-clinical exercises) SE – self-education
Social competencies:		
K1	Uses objective information sources	NE – (Non-clinical exercises)
K2	Puts the good of the patient above everything else	

Educational effect	For a grade of 3	For a grade of 4	For a grade of 5
W1 W2 W3 U1 U2 K1 K2	<p>The final test consists of 50 multiple choice questions In order to receive a credit for the examination a student must complete at least 61% of it correctly Insufficient (2.0) – below 61% Sufficient (3.0) – 61-69% Satisfactory (3.5) – 70-76% Good (4.0) – 77-84% Very Good (4.5) – 85-92% Excellent (5.0) – 93-100%</p> <p>In order to take the examination the student must be present during all exercise classes and receive a positive grade from a scientific presentation completed with the use of medical databases</p>		