



Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE (SUBJECT)

valid from the academic year 2018/2019

General Information

Module title	Clinical Pharmacology
Module type	Obligatory
Faculty	Faculty of Medicine and Dentistry
Field of study	Medicine and Dentistry
Major	Not applicable
Level of study	long-cycle (S2J)
Mode of study	Intramural
Year of studies, semester	Year IV, semester VII
ECTS credits (incl. semester breakdown)	1
Type/s of training	seminars (15h)/ practical (15h)
Form of assessment	graded assessment
Head of the Department/ Clinic, Unit	Prof. dr hab. Marek Drożdżik
Tutor responsible for the module	Prof. dr hab. Marek Drożdżik
Department's/ Clinic's/ Unit's website	www.farmakol.pum.edu.pl
Language	English

Detailed information

Module objectives		1. Familiarization with basic pharmacokinetic processes, genetic determinants of drug action, monitored therapy, serious adverse drug reactions. 2. Discussion of pharmacotherapy in bacterial and fungal infections. 3. The rules of medicine prescription in pregnancy. 4. Pharmacotherapy in life-threatening states. 5. Pharmacotherapy for pain and psychomotor agitation.
Prerequisite /essential requirements	Knowledge	Principles of general pharmacology
	Skills	The use of agents in bacterial, viral and fungal infections, considering pharmacokinetic and pharmacodynamic interactions; the use of anesthetics and agents for anxiety and psychomotor agitation; management of vitamin deficiency; management of bleeding and bleeding disorders; pharmacological treatment in life-threatening states.
	Competences	Teamwork and self-instruction skills

Description of the learning outcomes for the subject /module			
No. of learning outcome	Student, who has passed the (subject) knows /is able to /can:	SYMBOL (referring the standards) ZEK	Method of verification of learning outcomes
W01	Explains the relationship between morphological abnormalities and the altered function of organs and systems, clinical symptoms and diagnosis and treatment options	K_E.W01	T
W02	Lists the neurological effects of long-term used medications	K_E.W06	T
W03	Lists the rules of immunization against infectious diseases in children and adults	K_E.W09	T
W04	Explains the rules of pregnant women management in the field of dental care	K_E.W12	T
W05	Enumerates life-threatening states	K_E.W18	T
U01	Is able to plan diagnostic and therapeutic procedures in the case of the most common diseases in adults	K_E.U03	T
U02	Recognizes life-threatening states	K_E.U08	T
K01	Shows the habit of self-education and lifelong learning	K_K01	T
K02	Interacts and works in as a team member and takes care of his own and other co-workers safety	K_K03	T
K03	Understands the sense of responsibility	K_K07	O

Table presenting learning outcomes of the subject/module in relation to the form of classes									
No.	SYMBOL (referring the standards) ZEK	Type/s of training							
		Lecture	Seminar	Practical classes	Clinical classes	Other...
1.	K_E.W01		X	X					
2.	K_E.W06		X	X					
3.	K_E.W09		X	X					
4.	K_E.W12		X	X					
5.	K_E.W18		X	X					
6.	K_E.U03			X					
7.	K_E.U08			X					
8.	K_K01		X	X					
9.	K_K03		X	X					
10.	K_K07			X					

Module contents no.	Description of teaching programme	No. of hours	References to learning outcomes
	Seminars	15 hours	
TK01	Clinical pharmacology - definition, the fate of the drug in the body - pharmacokinetics and the treatment of dental patients	2	W01, W02, W03
TK02	Monitoring therapy using drug concentration in blood and saliva, the principles of bodily fluids sampling to determine the kinetics of specific drugs. Pharmacokinetic, pharmacodynamic and pharmaceutical interactions	2	W01, W02, W04
TK03	Prescription writing rules, handling of various sources of information about medicines and therapeutic standards	2	U01, K02, K03
TK04	Rules for drugs prescription during pregnancy, lactation, childhood, adults and selected disease states.	2	W03, W04, W05
TK05	Pharmacotherapy of hemostatic disorders in dentistry. Topically and systemic anti-haemorrhagic agents application	2	W05, U01, U02
TK06	Pharmacotherapy of bacterial infections in dentistry. Principles of topical and systemic antibacterial agents	1	W05, U01, U02
TK07	Immunosuppressive drugs and glucocorticoid pharmacotherapy in dentistry	1	W05, U01, U02
TK08	Anxiety and premedication in dentistry. The treatment of anxious patients, or patients managed with antipsychotic drugs or showing symptoms of drug addiction	1	W05, U01, U02
TK09	Principles of pharmacotherapy in selected emergency states in dentistry	1	W05, U01, U02
TK10	Test summary	1	W05, U01, U02
	Practical	15 hours	
TK01	Principles of effective and safe therapy of dental patients	1	W05, U01, U02
TK02	The rules of drugs combination, the choice of the administration route, time and dosage form	2	U01, K01, K02, K03
TK03	Oral and parenteral pharmacotherapy in dentistry, prescription writing	1	U01, K01, K02, K03
TK04	Drug dosing calculations rules for children and adults	1	W03, U01, K01, K02, K03
TK05	Risk assessment of procedure-related hemostatic complications - clinical cases	2	W05, U01, U02, K01, K02
TK06	Rules for prophylactic and therapeutic use of disinfectants, antifungal and antiviral agents in dentistry - clinical cases	2	W03, U01, K01, K02
TK07	Effect of drugs on the oral mucosa and in the masticatory system. Approach to drug side effects produced in the oral mucosa, prophylaxis and treatment of allergic reactions - clinical cases	2	W03, U01, K01, K02
TK08	Pharmacotherapy of pain in dentistry. Principles of analgesics combination in dentistry - clinical cases	2	W02, U01, K01, K02
TK09	Principles of pharmacotherapy in selected emergency states in dentistry: asthma attack, hypo- and hyperglycaemic states, seizures - clinical cases.	2	W05, U02, K01, K02

Booklist
Obligatory literature:
1. Pharmacology (Lippincott Illustrated Reviews Series) 5th Edition, 2014, ISBN-13: 978-1451113143 Richard A. Harvey, Michelle A Clark, Richard Finkel, Jose A. Rey, Karen Whalen
2. Pharmacology and Therapeutics for Dentistry, 7th Edition, 2017, ISBN: 9780323393072 Frank Dowd Bart Johnson Angelo Mariotti
Supplementary literature:
1. Basic and Clinical Pharmacology 13e (Int'l Ed), 13 Edition, 2015, ISBN: 9781259252907 Bertram G. Katzung, Susan B. Masters, Anthony J. Trevor
2. Pharmacology for Dentistry, 2nd Edition, 2013, ISBN: 9788131234556 Tara Shanbhag Smita Shenoy Veena Nayak

Student's workload (balance sheet of ECTS credits)			
Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]		
	Tutor	Student	Average
Contact hours with the tutor	30		
Time spent on preparation to seminars/ practical classess	1		
Time spent on reading recommended literature	1		
Time spent on writing report/making project			
Time spent on preparing to colloquium/ entry test	4		
Time spent on preparing to exam			
Other			
Student's workload in total	36		
ECTS credits for the subject (in total)	1		
Remarks			

* Selected examples of methods of assessment:

EP – written examination

EU – oral examination

ET – test examination

EPR – practical examination

K – colloquium

R – report

S – practical skills assessment

RZC – practical classes report, incl. discussion on results

O – student's active participation and attitude assessment

SL – lab report

SP – case study

PS - assessment of student's ability to work independently

W – entry test

PM – multimedial presentation

other...