



## Pomorski Uniwersytet Medyczny w Szczecinie

### MODULE SYLLABUS - PHARMACOLOGY General information

Nazwa ZAJĘĆ:	
Module type	Obligatory
PMU Faculty	Faculty of Medicine and Dentistry
Field of study	Medicine
Specjalność	-
Study level	Uniform master
Type of study	stationary, non-stationary
Year of study	IV, semester VII and VIII (block system)
ECTS	5
Forms of instruction (hours)	Seminars/classes 25 h seminars; 45 h classes Σ 70 godz.
Knowledge verification/grading system	<input type="checkbox"/> credit: <input checked="" type="checkbox"/> written, descriptive <input checked="" type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral  <input type="checkbox"/> credit, no grade  <input checked="" type="checkbox"/> final exam: <input type="checkbox"/> written, descriptive <input checked="" type="checkbox"/> test <input checked="" type="checkbox"/> practical <input checked="" type="checkbox"/> oral
Head of department	Prof. dr hab. n. med. Marek Drożdżik
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Web page	www.farmakol.pum.edu.pl
Instruction language	Polish/English

### Detailed information

Module tasks		1. Detailed information about particular drug classes, drug names, actions and principles for clinical application, and drug combination in a given therapeutic indication.; 2. Discussion of drug side effects, including drug-drug interaction consequences; 3. Drug prescription standards and practice of prescription.
Prerequisite knowledge	Knowledge	Principles of anatomy, biochemistry, physiology, pathophysiology
	Skills	Understanding of the basic terms of pharmacology, mechanisms of drug action in terms of indications and contraindications, dosage, side effects and toxicity, and interactions with other drugs.
	Social competences	Self-education, teamwork skills

DESCRIPTION OF TEACHING EFFECTS FOR THE MODULE (SUBJECT)			
Numer of teaching effects	Student, who completed the module (subject) knows/can/is able:	SYMBOL (reference) EKK	Assessing student achievement of learning outcomes
W01	knows and understands the mechanisms of defined groups of drugs	C.W35	K,ET,O
W02	determines the main mechanisms of action of drugs and pharmacokinetic processes, including age specificity	C.W36	K,ET,O
W03	determines the influence of disease processes on drug metabolism and elimination	C.W37	K,ET,O
W04	characterizes the basic principles of pharmacotherapy	C.W38	K,ET,O
W05	defines the most important side effects of drugs, including those resulting from interactions	C.W39	K,ET,O
W06	explains the problem of drug resistance, including multidrug resistance	C.W40	K,ET,O
W07	defines the indications for pharmacogenetic tests carried out in order to individualize pharmacotherapy	C.W41	K,ET,O
W.08	indicates basic directions of the development of therapy, in particular possibilities of cell, gene and targeted therapy in specific diseases	C.W42	K,ET,O
W09	can indicate groups of drugs, the abuse of which can lead to poisoning	C.W44	K,ET,O
U01	adapts drugs doses in order to address pathological states of the body and in individual organs	C.U14	O, SP, PS
U02	is able to design rational chemotherapy of infections approach, both empirical and targeted	C.U15	O, SP, PS
U03	can prepare prescriptions of all prescription forms of medicinal agents	C.U16	O, S, SP, PS, ERp.

U04	uses pharmaceutical guides and databases concerning medicinal products	C.U14	O, SP, PS
K01	notices and recognizes own limitations, performs self-assessment of educational deficits and needs	K.5	O
K02	promotes health behavior	K.6	O
K03	uses objective sources of information	K.7	O

**Traching effects matrix for the module (subject) referred to type of didactic forms**

Numer of teaching effects	Teaching effects	Type of didactic activity						
		Lecture	Seminar	Laboratory	Clinical classes	Simulation	E-learning	Others
W01	C.W35		x					
W02	C.W36		x					
W03	C.W37		x					
W04	C.W38		x					
W05	C.W39		x					
W06	C.W40		x					
W07	C.W41		x					
W08	C.W42		x					
W09	C.W44		x					
U01	C.U14			x				
U02	C.U15			x				
U03	C.U16			x				
U04	C.U17			x				
K01	K5			x				
K02	K6			x				
K03	K7			x				

**MODULE (SUBJECT) TEACHING CONTENT**

Symbol of teaching content	Description of teaching content	Hours	Reference to teaching effects for the module
<b>Seminars</b>			
TK01	Drug prescription. E-prescriptions	1	C.W35
TK02	Drugs used in disorders of hematopoiesis	2	C.W35, C.W36, C.W37, C.W38, C.W39, C.W42
TK03	Laxatives, antidiarrheal and hepatoprotective agents	2	C.W35, C.W36, C.W37, C.W38, C.W39, K5, K6, K7
TK04	Expectorant and antitussive drugs	2	C.W35, C.W36, C.W37, C.W38, C.W39, K5, K6, K7
TK05	Principles of infection management	2	C.W35, C.W36, C.W37, C.W38, C.W39, C.W40, C.W42, K5, K6, K7

TK06	Chemiotherapeutics	2	C.W35, C.W36, C.W37, C.W38, C.W39, C.W40, K5, K6, K7
TK07	Antiviral drugs	2	C.W35, C.W36, C.W37, C.W38, C.W39, C.W40, C.W42, K5, K6, K7
TK08	Pharmacotherapy of basic sexual dysfunction disorders	2	C.W35, C.W36, C.W37, C.W38, C.W39, K5, K6, K7
TK09	Therapy of hypothalamus and pituitary disorders	2	C.W35, C.W36, C.W37, C.W38, C.W39, K5, K6, K7
TK10	Peptides used in the treatment of diabetes mellitus	2	C.W35, C.W36, C.W37, C.W38, C.W39, C.W42, K5, K6, K7
TK11	Introduction into pain therapy	2	C.W35, C.W36, C.W37, C.W38, C.W39, C.W41, C.W42, C.W44, K5, K6, K7
TK12	Local anesthetics. Myorelaxant agents	2	C.W35, C.W36, C.W37, C.W38, C.W39, K5, K6, K7
TK13	Treatment of cancer and neuropathic pain	2	C.W35, C.W36, C.W37, C.W38, C.W39, C.W41, C.W42, C.W44, K5, K6, K7
<b>Practicals</b>			
TK01	Drug prescription	3	C.U16, C.U17, K5, K6, K7
TK02	Treatment of autoimmune and metabolic diseases	3	C.U14, C.U17, K5, K6, K7
TK03	Drugs affection hemostasis	3	C.U14, C.U17, K5, K6, K7
TK04	Prokinetic and antiemetic drugs. Peptic ulcer disease drugs.	3	C.U14, C.U15, C.U17, K5, K6, K7
TK05	Drugs used in the treatment of asthma and COPD	3	C.U14, C.U15, C.U17, K5, K6, K7
TK06	Antibiotics, part 1 – clinical applications	3	C.U14, C.U15, C.U17, K5, K6, K7
TK07	Antibiotics, part 2 – clinical applications	3	C.U14, C.U15, C.U17, K5, K6, K7
TK08	Treatment of tuberculosis, COVID-19. Antifungal and antiparasitic drugs	3	C.U14, C.U15, C.U17, K5, K6, K7
TK09	Treatments of thyroid and parathyroid glands pathologies. Drugs for osteoporosis	3	C.U14, C.U17, K5, K6, K7
TK10	Sex hormones. Hormonal contraception and replacement therapy	3	C.U14, C.U17, K5, K6, K7
TK11	Oral drugs for diabetes mellitus Drugs for dyslipidemias	3	C.U14, C.U17, K5, K6, K7
TK12	Opioid analgesics	3	C.U14, C.U17, K5, K6, K7

TK13	Non-opioid analgesics	3	C.U14, C.U17, K5, K6, K7
TK14	Glucocorticoids and mineralocorticoids	3	C.U14, C.U17, K5, K6, K7
TK15	Clinical cases – drug therapy aspects. Drug prescription. Drug prescription exam.	3	C.U16, C.U14, C.U17, K5, K6, K7

<b>Books</b>	
Pharmacology, 7th Edition, Lippincott Illustrated Reviews Series by Richard A. Harvey, Michelle A Clark, Richard Finkel, Jose A. Rey, Karen Whalen	
Pharmacology, 5th Edition, Elsevier By George M. Brenner, Craig Stevens	
Rang & Dale's Pharmacology, 9th Edition, Elsevier by James M. Ritter, Rod J. Flower, Graeme Henderson, Humphrey P. Rang	

<b>Student workload</b>	
Form of student workload (participation in classes/seminars, activity, report writing, etc.)	Student workload [h]
	Teacher evaluation
Direct teaching	70
Classes/seminar preparation	20
Self-reading of the specified literature	15
Laboratory reports writing/project preparation	-
Section testing preparation	30
Exam preparation	60
Others	-
Summary of students workload	195
ECTS points	5
<b>Comments</b>	