



Pomorski Uniwersytet Medyczny w Szczecinie

MODULE SYLLABUS (SUBJECT) General information

MODULE NAME: PHARMACOLOGY	
Module type	<i>Obligatory</i>
PMU Faculty	<i>Faculty of Medicine</i>
Field of study	<i>Medicine</i>
Speciality	<i>Not applicable</i>
Study level	<i>Uniform master</i>
Type of study	<i>stationary, non-stationary</i>
Year of study	III, semester VI
ECTS	3
Forms of instruction (hours)	<i>Lectures/seminars/classes 45h (25 h seminars; 20 h classes) credit</i>
Knowledge verification/grading system	<input checked="" type="checkbox"/> credit: <ul style="list-style-type: none"> <input type="checkbox"/> written, descriptive <input checked="" type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral <input type="checkbox"/> credit, no grade <input type="checkbox"/> final exam: <ul style="list-style-type: none"> <input type="checkbox"/> written, descriptive <input type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral
Head of department	Prof. dr hab. n. med. Marek Drożdżik
Responsible person	Prof. dr hab. Anna Machoy-Mokrzyńska amachoy@pum.edu.pl 91-4661589
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Web page	www.farmakol.pum.edu.pl
Instruction language	Polish/English

Detailed information

Module tasks		<p>1. Detailed information about particular drug classes, drug names, actions and principles for clinical application, and drug combination in a given therapeutic indication.</p> <p>2. Discussion of drug side effects, including drug-drug interaction consequences.</p> <p>3. Drug prescription standards and practice of prescription.</p>
Prerequisite knowledge	Knowledge	Principles of biochemistry, physiology, histology, genetics
	Skills	Basic mathematical calculations, the ability to use the acquired knowledge
	Social competences	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 (form of verification)
W01	is able to characterize individual groups of therapeutic agents	K_C.W34	K, ET
W02	is able to explain the mechanisms of action of drugs and their changes in the system depending on age	K_C.W35	K, ET
W03	discusses the impact of disease states on drug metabolism and elimination	K_C.W36	K, ET
W04	knows the basic principles of pharmacotherapy	K_C.W37	K, ET
W05	knows the most important side effects of drugs, including drug-drug interactions	K_C.W38	K, ET
W06	understands aspects of drug resistance, including multidrug resistance	K_C.W39	K, ET
W07	knows the indications for genetic testing to individualize pharmacotherapy	K_C.W40	K, ET
U01	adjusts drug dosing to adopt medication to pathological states	K_C.U14	K, EP
U02	can correctly prescribe all forms of drug formulas	K_C.U16	K, EP
U03	uses pharmaceutical sources and databases on medicinal products	K_C.U17	K, EP
K01	possess ability to work in a group and is aware of the responsibility associated with professional career	K_K03	O

Traching effects matrix for the module (subject) referred to type of didactic forms							
Numer of teaching effects	Teaching effects	Type of didactic activitiy					
		Lecture	Seminar	Laboratory	Clinical classes	Simulation	E-learning Others
W01	K_C.W34	X		X			
W02	K_C.W35	X		X			
W03	K_C.W36	X		X			
W04	K_C.W37	X		X			
W05	K_C.W38	X		X			
W06	K_C.W39			X			
W07	K_C.W40			X			
U01	K_C.U14			X			
U02	K_C.U16			X			
U03	K_C.U17			X			
K01	K_K03			X			

MODULE (SUBJECT) TEACHING CONTENT			
Symbol of teaching content	Description of teaching content	Hours	Reference to teaching effects for the module
Summer semester			
Lectures/Seminars			
TK01	Principles of pharmacology	1	K_C.W35,K_C.W36
TK02	Introduction to autonomic nervous system	1	K_C.W34,K_C.W35 K_C.W38
TK03	Autonomic nervous system drugs in cardiovascular diseases	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK04	Autacoids	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK05	Diuretics	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK06	Antiarrhythmic drugs	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK07	Hypotensive agents	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK08	Drugs for coronary heart disease	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK09	Selected aspects of drugs in cardiovascular medicine	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38 K_C.W39
TK010	Introduction to psychotropic drugs	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38 K_C.W39
TK011	Hypnotics	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK012	Pharmacotherapy of affective disorders - introduction	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38

TK013	Procognitive drugs	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK014	Drugs for extrapyramidal system disorders	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK015	Drugs for sclerosis multiplex treatment	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK016	Antiepileptic drugs, part. 1	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK017	Antiepileptic drugs, part. 2	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK018	Psychoactive agents in medical applications	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK019	Atypical applications of psychotropic agents	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK020	General anesthetics	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK021	Myorelaxant agents	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK022	Drugs for central nervous system disorders – specific applications	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38 K_C.W39
TK023	Immunosuppressant drugs	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK024	Anticancer drugs	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
TK025	Biologic drugs	1	K_C.W34,K_C.W35 K_C.W37,K_C.W38
Practicals			
TK01	Principles of pharmacokinetics and pharmacodynamics	2	K_C.U14, K_K03
TK02	Parasympathetic system agents	1	K_C.U14, K_C.U17
TK03	Agonists of sympathetic system	1	K_C.U14, K_C.U17
TK04	Antagonists of sympathetic system	1	K_C.U14, K_C.U17
TK05	Renin-angiotensin-aldosterone system drugs, nitrates, calcium channel antagonists	2	K_C.U14, K_C.U17
TK06	Drugs for peripheral vascular system diseases	1	K_C.U14, K_C.U17
TK07	Summary – cardiovascular drugs pharmacology	2	K_C.U14, K_C.U17, K_K03
TK08	Anxiolytic and sedative drugs	2	K_C.U14, K_C.U17
TK09	Antipsychotic drugs	2	K_C.U14, K_C.U17
TK10	Pharmacotherapy of affective disorders	2	K_C.U14, K_C.U17
TK11	Summary – central nervous system drugs	1	K_C.U14, K_C.U17, K_K03
TK12	Drug prescription - introduction	2	K_KC.U16,K_K03
TK13	Summary	1	K_C.U14, K_C.U16, K_C.U17, K_K03

Books
Basic
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
Auxiliary
Goodman and Gilman's The Pharmacological Basis of Therapeutics, 13th Edition, McGraw-Hill Education by Laurence Brunton, Bjorn Knollman, Randa Hilal-Dandan

Student workload	
Form of student workload (participation in classes/seminars, activity, report writing, etc.)	Student workload [h]
	Teacher evaluation
Direct teaching	45
Classes/seminar preparation	10
Self-reading of the specified literature	15
Laboratory reports writing/project preparation	-
Section testing preparation	25
Exam preparation	-
Others	-
Summary of students workload	95
ECTS points	3
Comments	