



Pomorski Uniwersytet Medyczny w Szczecinie

MODULE SYLLABUS - PHARMACOLOGY General information

MODULE: PHARMACOLOGY	
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 type="checkbox"/> oral
Head of department	Prof. dr hab. n. med. Marek Drożdżik
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Web page	https://www.pum.edu.pl/studia_iii_stopnia/informacje_z_jednostek/wmi/katedra_farmakologii/
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.U17	O, S, PS, ERp
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
Seminars			
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, IBD	2	C.W35, C.W36, C.W37, C.W38, C.W39, K5, K6, K7
TK04	Drugs of respiratory tract. Expectorant and antitussive drugs. Clinical cases.	2	C.W35, C.W36, C.W37, C.W38, C.W39, K5, K6, K7
TK05	Introduction to CNS drugs Clinical cases.	2	C.W35, C.W36, C.W37, C.W38, C.W39, C.W40, C.W42, K5, K6, K7

TK06	Antiepileptic drugs. Clinical cases.	2	C.W35, C.W36, C.W37, C.W38, C.W39, C.W40, K5, K6, K7
TK07	Anxiolytic and hypnotic drugs.	2	C.W35, C.W36, C.W37, C.W38, C.W39, C.W40, C.W42, K5, K6, K7
TK08	Drugs for pituitary and hypothalamus disorders. Clinical cases.	2	C.W35, C.W36, C.W37, C.W38, C.W39, K5, K6, K7
TK09	Drugs for diabetes mellitus (parenteral)	2	C.W35, C.W36, C.W37, C.W38, C.W39, K5, K6, K7
TK10	Drugs for diabetes mellitus (oral). Clinical cases.	2	C.W35, C.W36, C.W37, C.W38, C.W39, C.W42, K5, K6, K7
TK11	Drugs for heart failure.	2	C.W35, C.W36, C.W37, C.W38, C.W39, C.W41, C.W42, C.W44, K5, K6, K7
TK12	Drugs for hypertension. Clinical cases.	2	C.W35, C.W36, C.W37, C.W38, C.W39, K5, K6, K7
TK13	Antiarrhythmic agents. Clinical cases.	2	C.W35, C.W36, C.W37, C.W38, C.W39, C.W41, C.W42, C.W44, K5, K6, K7
Practicals			
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	4	C.U14, C.U17, K5, K6, K7
TK04	Prokinetic and antiemetic drugs. Peptic ulcer disease drugs.	4	C.U14, C.U15, C.U17, K5, K6, K7
TK05	Drugs used in the treatment of asthma and COPD	2	C.U14, C.U15, C.U17, K5, K6, K7
TK06	Drugs affecting RAA system. Diuretics.	4	C.U14, C.U15, C.U17, K5, K6, K7
TK07	Calcium channel blockers. Nitrates.	4	C.U14, C.U15, C.U17, K5, K6, K7
TK08	Treatment of acute and chronic coronary events.	2	C.U14, C.U15, C.U17, K5, K6, K7
TK09	Treatments of thyroid and parathyroid glands pathologies. Drugs for osteoporosis.	4	C.U14, C.U17, K5, K6, K7
TK10	Sex hormones. Hormonal contraception and replacement therapy.	4	C.U14, C.U17, K5, K6, K7
TK11	Drugs for dyslipidemia.	2	C.U14, C.U17, K5, K6, K7
TK12	Pharmacotherapy of mood disorders. Antidepressant drugs. Approach to treatment of mania.	4	C.U14, C.U17, K5, K6, K7

TK13	Antipsychotic drugs. Drugs for treatment of extrapyramidal disorders.	4	C.U14, C.U17, K5, K6, K7
TK14	Procognitive agents.	1	C.U14, C.U17, K5, K6, K7

Books	
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	

Student workload	
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
Comments	