



Pomorski Uniwersytet Medyczny w Szczecinie

Pomeranian Medical University in Szczecin[PUM]

(COURSE)MODULE SYLLABUS

General information

Name of Course: Toxicology	
Type of course	<i>Mandatory</i>
PUM Faculty	<i>Faculty of Medicine and Dentistry</i>
Field of study	<i>Medicine</i>
Specialization	<i>not applicable</i>
Level of study	<i>Long-term studies</i>
Form of study	<i>Full-time, part-time</i>
Year of study/semester of study	4th year, 7th and 8th semester
Number of ECTS credits allocated	1,5
Forms of teaching (number of hours)	<i>lectures/seminars/practical exercises/laboratories/etc. (number of hours)</i> seminars - 10 hours practical exercises - 20 hours
Methods of verification and assessment of learning outcomes	- <i>graded credit:</i> <input type="checkbox"/> <i>Descriptive credit</i> <i>X test</i> <input type="checkbox"/> <i>practical credit</i> <input type="checkbox"/> <i>oral credit</i> <input type="checkbox"/> <i>credit without grade</i> - <i>final exam:</i> <input type="checkbox"/> <i>descriptive credit</i> <input type="checkbox"/> <i>test</i> <input type="checkbox"/> <i>practical credit</i> <input type="checkbox"/> <i>oral credit</i>
Head of Unit	<i>prof. dr hab Krzysztof Borowiak, prof., Ph.D.</i>
Teaching assistant professor or person responsible for the course	<i>Dr Barbara Potocka-Banaś , Ph.D</i> <i>bpotocka@pum.edu.pl, 0914661582</i>
Name and contact details of unit	<i>Department of Clinical and Forensic Toxicology</i> <i>Tel. 0914661582</i>
Unit's website	<i>www. zms.pum.edu.pl</i>
Language of instruction	<i>Polish/English</i>

Detailed information

Course objectives		<p>The learning objective of the module is to acquire the following skills :</p> <ul style="list-style-type: none"> - getting to know the principles of organization and tasks performed by toxicological centres - getting acquainted with general principles of management and treatment of poisoning cases with selected xenobiotics - practical mastering of the gastric lavage procedure - management of the addicted patient - carrying out simple toxicological tests - interpretation of toxicological results in relation to the clinical state of the patient 	
Preliminary requirements in terms of	Knowledge	<p>Familiarity of :</p> <ul style="list-style-type: none"> - toxicology of drugs and psychoactive substances - analytical methods used in toxicology 	
	Skills	<p>Providing aid to the poisoned patient and selection of management procedures</p>	
	Social competences	<p>The habit of self-education, teamwork</p>	
Learning outcomes			
Number of learning outcome	A student who has completed of the COURSE knows/can:	SYMBOL (reference to) learning outcomes for the field of study	Method of verifying the learning outcomes*
W01	characterises the different groups of medicinal products	K_C.W34	O, SP, SL
W02	determines the influence of disease processes on drug metabolism and elimination	K_C.W36	O, SP, SL
W03	knows the main adverse drug reactions, including those resulting from drug interactions	K_C.W38	O, SP, SL
W04	knows the basic concepts of general toxicology	K_C.W42	O, SP, SL
W05	knows the groups of drugs whose abuse can lead to poisoning	K_C.W43	O, SP, SL
W06	knows the symptoms of the most common acute poisonings, including alcohol, drugs, psychoactive substances, heavy metals and selected groups of drugs	K_C.W44	O, SP, SL
W07	knows the basic principles of diagnostic procedures in poisoning	K_C.W45	O, SP, SL
U01	interprets results of toxicological tests	K_C.U19	O, SP, SL
U02	assesses toxicological risks in specific age groups and in states of hepatic and renal insufficiency, and to prevent drug poisoning	K_C.U18	O, SP, SL
K01	shows the habit of self-education, understands the need of lifelong learning, is able to inspire and organize the learning process of others	K_K03	O, SP, SL

Table of learning outcomes in relation to the form of classes								
Number of learning outcome	Learning outcomes	Form of the classes						
		Lecture	Seminar	Practical exercises	Clinical exercises	Simulations	E-learning	Other forms
1.	K_C.W34		X					
2.	K_C.W36		X					
3.	K_C.W38		X					
4.	K_C.W42		X					
5.	K_C.W43		X	X				
6.	K_C.W44		X		X			
7.	K_C.W45			X				
8.	K_C.U19			X				
9.	K_C.U18		X		X			
10.	K_K03			X				

TABLE OF CURRICULUM			
Curriculum number	Curriculum	Number of hours	Reference to the learning outcomes for the CLASSES
SEMINARS: winter and summer semesters			
TK01	Fate of the xenobiotic in the system	1,5	W01, W02, W03, W04, K01
TK02	Medical management of acute poisoning	2,0	W05, W06, K01
TK03	Poisoning by fungi and higher plants	1,0	W06, U01, K01
TK04	Poisoning by psychotropic drugs	1,5	W05, K01
TK05	Analytical methods used in toxicology	1,0	W07, K01
TK05	Toxicology of selected drugs	3,0	W01, W02, W03, W06, K01
Practical Exercises: winter and summer semester			
TK01	Management patterns in acute xenobiotic poisoning	10	W07
TK02	Gastric lavage	1	W07
TK03	Analytical methods used in toxicology	2	W07, U01
TK04	Diagnosis of mushroom poisoning	2	U01
TK05	Patient addicted to psychoactive drugs	5	U01, U02,
Recommended Literature:			
Required literature:			
1. Interna Szczeklika podręcznik chorób wewnętrznych 2017 - Piotr Gajewski , Medycyna Praktyczna 2017			
Supplementary literature:			
1. Wybrane zagadnienia z toksykologii ogólnej i ostrych zatruc- g -Borowiak K., Machoy-Mokrzyńska A., ed. PAM 2003			
2. Podstawy toksykologii - Piotrowski J., wyd. Naukowo-Techniczne 2006			
3. Zarys toksykologii klinicznej - Pach J., Jagiellonian University 2009			

Student workload	
Form of student workload (participation in classes, activity, report preparation, etc.)	Student workload [h].
	In the teacher's assessment (opinion)
Contact hours with the teacher/instructor	30
Preparation for practical exercises/seminar	7
Reading the recommended literature	10
Writing a lab/exercise report/preparing a project/paper, etc.	1
Preparation for a test/short test	-
Preparing for the exam	4
Other	-
Total student workload	52
ECTS credits for the module/course	1,5
Notes	

*Example ways of verification of educational outcomes:

EP - written exam

EU - oral test

ET - test exam

EPR - practical test

K - test

R - paper

S - testing of practical skills

RZC - report from practical exercises with discussion of results

O - evaluation of student's activity and attitude

SL - Laboratory report

SP - case study

PS - assessment of ability to work independently

W - short test before the beginning of classes

PM - multimedia presentation

and other