



Pomeranian Medical University in Szczecin[PUM]
COURSE SYLLABUS
General information

Name of Course: Advances in genetic-clinical correlations	
Type of activity	Elective
PUM Faculty	Faculty of Medicine and Dentistry
Field of study	Medicine
Specialization	-
Level of study	Long-term studies
Form of study	Full-time
Year of study /semester	4 / winter and summer semester (BLOCK)
Number of ECTS credits allocated	0,75
Forms of teaching (number of hours)	Lectures (e-learning) - 15h
Methods of verification and assessment of learning outcomes *	<input checked="" type="checkbox"/> graded credit: <input checked="" type="checkbox"/> descriptive credit <input type="checkbox"/> test credit <input type="checkbox"/> practical credit <input type="checkbox"/> oral credit <input type="checkbox"/> credit without grade <input type="checkbox"/> final exam: <input type="checkbox"/> descriptive credit <input type="checkbox"/> test credit <input type="checkbox"/> practical credit <input type="checkbox"/> oral credit
Head of Unit	Prof. dr. hab. Jan Lubiński, Prof. PhD
Teaching assistant professor or person responsible for the course	Urszula Teodorczyk PhD Elżbieta Kowalska, PhD
Name and contact details of unit	Department of Genetics and Pathomorphology ul. Unii Lubelskiej 1, 71-252 Szczecin tel. 91 441-72-50 e-mail: lubinski@pum.edu.pl
Unit's website	https://www.pum.edu.pl/wydzialy/wydzial-lekarsko-biotechnologiczny/zaklad-genetyki-i-patomorfologii
Language of instruction	Polish/English

*tick as appropriate, changing to .

Detailed information

Course objectives		The objective of the module is to present the latest knowledge in the field of genetics of screening for genetic alterations.
Preliminary requirements in terms of	Knowledge	Knowledge of basic concepts of genetics, chromosome structure and description of the normal human karyotype
	Skills	Ability to approach treatment in a personalized medicine scheme
	Social competences	The habit of self-education, teamwork

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	knows the basic concepts of genetics	K_C.W1	PM
W02	knows the principles of inheritance of different numbers of traits, inheritance of quantitative traits, independent inheritance of traits and inheritance of extra-nuclear genetic information	K_C.W5	PM
W03	knows the basis of diagnosis of gene and chromosome mutations responsible for inherited and acquired diseases, including cancer	K_C.W9	PM
W04	knows the genetic mechanisms of drug resistance acquisition by microorganisms and cancer cells	K_C.W11	PM
W05	defines the clinical course of specific and non-specific inflammations and describes the processes of regeneration of tissues and organs	K_C.W27	PM
W06	knows the indications for genetic testing in order to individualise pharmacotherapy	K_C.W40	PM
W07	knows the basic directions of therapy development, in particular the possibilities of cell, gene and targeted therapy in specific diseases	K_C.W41	PM
K01	understands the need for lifelong learning	K_K01	PM
K02	is able to formulate opinions concerning various aspects of professional activity	K_K04	PM
K03	demonstrates the habit of self-education	K_K05	PM

Table of learning outcomes in relation to the form of classes							
Number of learning outcome	Learning outcomes	Form of the classes					
		Lecture (e-l)	Seminar	Practical Exercises	Clinical exercises	Simulations	E-learning
W01	K_C.W1	X					
W02	K_C.W5	X					
W03	K_C.W9	X					
W04	K_C.W11	X					
W05	K_C.W27	X					
W06	K_C.W40	X					
W07	K_C.W41	X					
K01	K_K01	X					
K02	K_K04	X					
K03	K_K05	X					

TABLE OF CURRICULUM			
Curriculum number	Curriculum content	Number of hours	Reference to the learning outcomes for the CLASSES
Winter and summer semester (BLOCK)			
Lectures - 15h			
TK01	Different patterns of medical management depending on gene constitutional status.	7	W01, W02, W03, W04, W05, W06. W07, K01, K02, K03
TK02	Genetic-clinical correlations, contemporary methods of identifying and screening for genetic alterations	8	W01, W02, W03, W04, W05, W06. W07, K01, K02, K03
Seminars			
Practical Exercises			

Recommended Literature:
Required literature:
1. Specialist literature from the last 3 years in journals such as: Nature Genetics, JAMA, International Journal of Cancer, Lancet, PLOS One, Breast Cancer Research and Treatment, Journal of Clinical Oncology, Hereditary Cancer in Clinical Practice etc..
Complementary literature:
1.

Student workload	
Form of student workload (class participation, activity, report preparation, etc.)	Student workload [h].
	In the teacher's assessment (opinion)
Contact hours with the teacher/instructor	15
Preparation for exercise/seminar	
Reading the indicated literature	5
Writing a lab/exercise report/preparing a project/reference, etc.	
Preparation for the test/short test	
Preparing for the exam	
Other	
Total student workload	20
ECTS credits	0,75
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

RZĆ - 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