



Pomorski Uniwersytet Medyczny w Szczecinie
SYLLABUS of the MODULE (SUBJECT)

General information

Module name: Clinical genetics	
Module type	Obligatory
Faculty PMU	Medicine and Dentistry
Major	Medical and Dentistry
Specialty	-
Level of study	Long-cycle studies
Form of study	full-time/part-time
Year, semester of studies e.g. Year 1, semester (I and II)	Year 2, (semester III - winter)
ECTS credits (incl. semester breakdown)	1
Type/s of training	Seminars (2h) Practical classes (8h)
Form of assessment	graded assessment
Head of the Department/ Clinic, Unit	prof. dr hab. Jan Lubiński
Persons conducting classes with indication of a tutor or person responsible for the module	prof. dr hab. n. med. prof. dr hab. n. med. Jacek Gronwald prof. dr hab. n. med. Tadeusz Dębniak dr n. med. Aleksandra Grabarek dr n. med. Elżbieta Kowalska dr n. med. Tomasz Huzarski lek. med. Olgierd Ashuryk
Department's/Clinic's/Unit's website	www.pum.edu.pl/wydzialy/wydzial-lekarsko-biotechnologiczny/zaklad-genetyki-i-patomorfologii
Language	Polish/English

Detailed information

Module/subject objectives		Providing basic knowledge of modern clinical genetics relevant to any branch of medicine. It is essential, among other things, to know the principles of inheritance and diagnosis of hereditary diseases, identification of genes responsible for the formation of genetically determined diseases, mechanisms of gene regulation and expression; mechanisms of DNA damage repair, gene therapy, etc.
Prerequisite /essential requirements	Knowledge	Knowledge of basic concepts of genetics, chromosome structure and description of normal human karyotype.
	Skills	Ability to solve crosses according to Mendel's laws.
	Competences	Self-learning habits, teamwork

Description of learning outcomes for the module (subject)			
No. of learning outcome	Student, who has passed the (subject)	Symbol (Referring to) Assumed Learning Outcomes	Means of verification of learning outcomes*
W01	have knowledge of genetics and molecular biology	K_B.W17	multiple choice test, assessment
W02	knows the clinical application of the principles of genetics	K_B.W18	
U01	applies knowledge of genetics and molecular biology in clinical work	K_B.U05	
K01	understands the need for lifelong learning and has the habit of self-education Self-education habit	K_K01	
K02	accepts the need for ethical standards	K_K02	
K03	can formulate opinions on various aspects of professional activity	K_K10	

Table presenting LEARNING OUTCOMES in relation to the form of classes								
No.	Symbol (referring to) Assumed Learning Outcomes	Form of didactic classes						
		Lecture	Seminar	Practical	Clinical classes	others ...
1.	K_B.W17		X					
2.	K_B.W18		X					
3.	K_B.U05				X			
4.	K_K01				X			
5.	K_K02				X			
6.	K_K10				X			

No. of learning content	Description of learning content	Number of hours	Referring to learning outcomes for the module
Seminars:			
TK01	Fundamentals of heredity, cancers Cytogenetic diagnosis and chromosome syndromes (DOWN) Developmental defects and genetic syndromes in dentistry	1	W01-W02
TK02	Haemorrhagic septicaemia Molecular techniques in diagnosis of genetic diseases Ethics in genetics, legal aspects of genetic research	1	W01-W02
Practical classes			
TK01	Fundamentals of heredity, cancers	1	U01, K01-K03
TK02	Haemorrhagic septicaemia	1	U01, K01-K03
TK03	Cytogenetic diagnosis and chromosome syndromes (DOWN)	1	U01, K01-K03
TK04	Developmental defects and genetic syndromes in dentistry	2	U01, K01-K03
TK05	Molecular techniques in diagnosis of genetic diseases	2	U01, K01-K03
TK06	Ethics in genetics, legal aspects of genetic research	1	U01, K01-K03

Booklist
Obligatory literature
1. „Podstawy Genetyki Medycznej” M. H. Connor; M. Ferguson-Smith, PZWL Warszawa 1998
2. „Genetyka” J. M. Friedman; F. J. Gill i inni (red.) J. Limona, ELSEVIER URBAN & PARTNER WROCŁAW 1997
3. „Genetyka człowieka. Rozwiązanie problemów medycznych” B. R. Korf PWN Warszawa 2003
Supplementary literature:
1. „Genetyka kliniczna nowotworów 2010” monografia (red.) J. Lubiński
2. „Genetyka kliniczna nowotworów 2011” monografia (red.) J. Lubiński

Student's workload (balance of ECTS credits)			
Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]		
	Tutor	Student	Average
Contact hours with the tutor	10		
Time spent on preparation to seminars/practical classes	2		
Time spent on reading recommended literature	10		
Time spent on writing report on Laboratory/practical classes/making project/paper etc.			
Time spent on preparing to colloquium/ entry test			
Time spent on preparing to exam			
Other			
Student's workload in total	22		
ECTS credits for the module/subject	1		
Notes			

* Selected examples of methods of assessment:

EP – written examination

EU – oral examination

ET – test examination

EPR – practical examination K – colloquium

R – report

S – practical skills assessment

RZC – practical classes report, incl. discussion on results

O – student's active participation and attitude assessment

SL – laboratory report

SP – case study

PS - assessment of student's ability to work independently

W – entry test

PM – multimedial presentation and other