



Pomorski Uniwersytet Medyczny w Szczecinie

SYLLABUS of the MODULE (SUBJECT) General information

Module title: CLINICAL GENETICS	
Module type	Obligatory /Facultative (select)
Faculty PMU	Faculty of Medicine and Dentistry
Major	Medical and Dentistry
Specialty	-
Level of study	long-cycle
Mode of study	full-time/part-time
Year of studies, semester	2
ECTS credits (incl. semester breakdown)	1
Type/s of training (Number of hours)	Seminars (2h) Practical classes (8h)
Form of assessment ¹	<input checked="" type="checkbox"/> graded assessment: <ul style="list-style-type: none"> <input type="checkbox"/> descriptive <input checked="" type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral <input type="checkbox"/> non-graded assessment <ul style="list-style-type: none"> <input type="checkbox"/> final examination: <ul style="list-style-type: none"> <input type="checkbox"/> descriptive <input type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral
Head of the Department /Clinic, Unit	prof. dr hab. Jan Lubiński
Tutor responsible for the module	Dr Elżbieta Kowalska
Name and contact data of the unit	Department of Genetics and Pathomorphology ul. Unii Lubelskiej 1 71-252 Szczecin tel. 91 441-72-50 e-mail: lubinski@pum.edu.pl
Department's/ Clinic's/ Unit's website	https://www.pum.edu.pl/wydzialy/wydzial-lekarsko-biotechnologiczny/zaklad-genetyki-i-patomorfologii
Language	Polish/English

Detailed information

Module objectives		Providing basic knowledge of modern clinical genetics relevant to any branch of medicine. Among other things, it is essential to know the principles of inheritance and diagnosis of hereditary diseases, identification of genes responsible for the formation of genetically conditioned 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 crosswords according to Mendel's laws.
	Competences	Self-learning habits, teamwork

Description of the learning outcomes for the subject/module			
No. of learning outcome	Student, who has passed the (subject) knows /is able to /can:	SYMBOL (referring the standards)	Method of verification of learning outcomes*
W01	knows and understands issues of genetics and molecular biology	B.W17	assessment test
W02	knows and understands clinical application of principles of genetics	B.W18	assessment test
U01	is able to use knowledge of genetics and molecular biology in clinical practice	B.U5	O
K01	is ready to notice and recognize own limitations, make self-assessment of educational deficits and needs	K.5.	O
K02	is ready to take activities towards patient on the basis of ethical principles with awareness of social conditions and disease restrictions	K.4.	O
K03	is ready to draw conclusions from own measurements or observations	K.8.	O

Table presenting LEARNING OUTCOMES in relation to the form of classes							
No. of learning outcome	Learning outcomes	Type of training					
		Lecture	Seminar	Practical classes	Clinical classes	Simulations	E-learning
W01	B.W17		X				
W02	B.W18		X				
U01	B.U5				X		
K01	K.5.				X		
K02	K.4.				X		
K03	K.8.				X		

Table presenting TEACHING PROGRAMME			
No. of a teaching programme	Teaching programme	Number of hours	References to learning outcomes
Winter semester			
Seminars			
TK01	Fundamentals of heredity, cancer Cytogenetic diagnosis and chromosome syndromes (DOWN) Developmental defects and genetic syndromes in dentistry	1	W01-W02
TK02	Haemorrhagic septicaemia Molecular techniques in the diagnosis of genetic diseases Ethics in genetics, legal aspects of genetic research	1	W01-W02
Practical classes			
TK01	Fundamentals of heredity, cancer	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 the 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 WROCLAW 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	
Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]
	Tutor
Contact hours with the tutor	10
Time spent on preparation to seminars/ practical classess	2
Time spent on reading recommended literature	10
Time spent on writing report/making project	
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 course (in total)	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 – lab report

SP – case study

PS - assessment of student's ability to work independently

W – entry test

PM – multimedial presentation

other...