Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE (SUBJECT)
General Information

Module title: Genetics in dentistry	
Module type	Elective
Faculty PMU	Faculty of Medicine and Dentistry
Major	Dentistry
Level of study	Long-cycle (S2J)
Mode of study	Full-time studies
Year of studies, semester	Year 2, semester VI
ECTS credits (incl. semester breakdown)	2
Type/s of training	Seminars – 25h
Form of assessment*	☒graded assessment: ☐descriptive ☒test ☐practical ☐oral ☐non-graded assessment ☐final examination ☐descriptive ☐test ☐practical ☐oral
Head of the Department/ Clinic, Unit	Prof. dr hab. n. zdr. Anna Grzywacz
Tutor responsible for the module	Dr n. med. Aleksandra Suchanecka e-mail: aleksandra.suchanecka@pum.edu.pl
Department's/ Clinic's/ Unit's website Samodzielna Pracownia Genetyki i Epigenetyki Behawioralnej al. Powstańców Wlkp. 72, 70-111 Szczecin Budynek K, II piętro tel: 91 466 1491, 91 466 1498 https://www.pum.edu.pl/studia_iii_stopnia/informacje_z_jednostek/wmis/katedra_diagnostyki_laboratoryjnej/samodzielna_pracownia_genetyki_i_epigenetyki_behawioralnej/	
Language	English

* replace ☐ into ☒ where applicable

Detailed information

Module objectives		The course aims to familiarise the student with the basics of genetics in dentistry with particular reference to its application in the analysis of multifactorial diseases taking into account the research methodology.
Prerequisite /essential requirements	Knowledge	-
	Skills	-
	Competences	-

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 the autonomy of natural teeth	A.W7.	K
W02	knows and understands issues of genetics and molecular biology	B.W15.	K
W03	knows and understands the clinical application of principles of genetics	B.W16.	K
W04	knows and understands the basic IT and biostatistical tools used in medicine, including medical databases, spreadsheets and basics of computer graphics	B.W23.	K
W05	knows and understands the basic methods of statistical analysis used in population and diagnostic tests	B.W24.	K
W06	knows und undertands human physiological bacterial flora	C.W2.	K
U01	is able to interpret physical phenomena occurring in stomatognathic system	B.U1.	K
K01	is ready to notice and recognize own limitations, make self-assessment of educational deficits and needs	K.5.	O
K02	is ready to use reliable sources of information	K.7.	O

Table presenting LEARNING OUTCOMES in relation to the form of classes

No. of learning outcome	Learning outcomes	Type of training						
		Lecture	Seminar	Practical	Clinical classes	Simulations	E-learning	Other…
W01	A.W7.		X					
W02	B.W15.		X					

W03	B.W16.		X					
W04	B.W23.		X					
W05	B.W24.		X					
W06	C.W2.		X					
U01	B.U1.		X					
K01	K.5.		X					
K02	K.7.		X					

Table presenting TEACHING PROGRAMME			
No. of a teaching programme	**Teaching programme**	**No. of hours**	**References to learning outcomes**
Summer semester			
Seminars			
TK01	Genetics - basic definitions and terms.	2	B.W15., B.W16., K.5., K.7.
TK02	Inheritance as a process.	2	B.W15., B.W16., K.5., K.7.
TK03	Mutations and polymorphisms.	2	B.W15., B.W16., K.5., K.7.
TK04	Methodology of material collection and testing.	2	B.W15., B.W16., K.5., K.7.
TK05	Genetic research techniques.	2	B.W15., B.W16., K.5., K.7.
TK06	Genes associated with caries.	2	A.W7., B.W15., B.W16., B.W23., B.W24., C.W2., B.U1., K.5., K.7.
TK07	Genes associated with periodontitis.	2	A.W7., B.W15., B.W16., B.W23., B.W24., C.W2., B.U1., K.5., K.7.
TK08	Genetic determinants of retained teeth.	2	A.W7., B.W15., B.W16., B.W23., B.W24., B.U1., K.5., K.7.
TK09	Epigenetics in dentistry.	2	A.W7., B.W15., B.W16., B.W23., B.W24., B.U1., K.5., K.7.
TK10	Statistical methods.	2	B.W15., B.W16., B.W23.,

			B.W24., K.5., K.7.
TK11	Strategies for selecting study groups in scientific research.	2	B.W15., B.W16., , B.W23., B.W24., K.5., K.7.
TK12	Analysis of recent scientific research on genetics in dentistry.	3	A.W7., B.W15., B.W16., B.W23., B.W24., B.U1., K.5., K.7.

Booklist
Obligatory literature:
1. A.R. Vieira. Genetic Basis of Oral Health Conditions. Springer Nature Switzerland AG 2019, corrected publication 2020. ISBN 978-3-030-14484-5, ISBN 978-3-030-14485-2 (eBook) https://doi.org/10.1007/978-3-030-14485-2
Supplementary literature:
1. -

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	25
Time spent on preparation to seminars/ practical classess	
Time spent on reading recommended literature	
Time spent on writing report/making project	5
Time spent on preparing to colloqium/ entry test	4
Time spent on preparing to exam	
Other …..	
Student's workload in total	34
ECTS credits for the subject (in total)	2
Remarks	

* Selected examples of methods of assessment:
EP – written examination
EU – oral examination
ET – test examination
EPR – practical examination

K – colloqium
R – report
S – practical skills assessment
RZĆ – 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…