



Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE (SUBJECT)

valid from the academic year 2018/2019

General Information

Module title	Radiology Dental and General
Module type	Obligatory
Faculty	Faculty of Medicine and Dentistry
Field of study	Medicine and Dentistry
Major	Not applicable
Level of study	long-cycle (S2J)
Mode of study	intramural
Year of studies, semester	3 Year, V semester and VI semester
ECTS credits (incl. semester breakdown)	5 ECTS, (V semester -2, VI semester -3)
Type/s of training	lectures – 14h seminars - 36h (V-15, VI-21) practical classes – 24h (V-12, VI-12)
Form of assessment	non-graded assessment
Head of the Department/ Clinic, Unit	prof. zw. dr hab. Grażyna Wilk
Tutor responsible for the module	prof. zw. dr hab. Grażyna Wilk e-mail: dzzradiol@pum.edu.pl
Department's/ Clinic's/ Unit's website	General and Dental Radiology Department, Al. Powstańców Wielkopolskich 72, 70-111 Szczecin, tel. 914661174
Language	English

Detailed information

Module objectives		<p>The main objective of the course in general and dental radiology is the integration of the knowledge concerning the usefulness of the various types of radiation, examination techniques with clinical problems in dentistry as well as in medicine.</p> <p>The rules of radiation protection for patients as well as medical staff are very important. Students must know all the rules and legal aspects of such procedures.</p> <p>Visualization of the caries, periodontal changes, otitis, sinusitis on intraoral and extraoral X-rays with the use of different techniques has a great value in the everyday dental practice. Students should be able to differentiate pathological changes of temporo-mandibular joints, facio-cranial neoplasms as well as traumas on the basis of conventional X-rays, CT, MR and US. Students must know the advantages and disadvantages of the mentioned methods.</p> <p>Diagnostics of the chest, abdomen, vessels as well as osseous systems should give the students knowledge of the efficacy of the conventional methods, US, CT, MR in evaluation of different pathology.</p>
Prerequisite /essential requirements	Knowledge	Knowledge of human anatomy as well as pathology
	Skills	Knowledge of the types of radiation, focusing on an X-rays and their properties as well as their use in medicine and dentistry
	Competences	<p>1/ The ability to establish a good contact with the patients, work in a team as well as self studying of the dentistry and medicine</p> <p>2/Knowledge of the diagnostics of the dental and maxillo-facial disorders on the intraoral, extraoral X-rays as well as pantomogrammes.</p>

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) ZEK	Method of verification of learning outcomes *
W01	Knows the diagnostics of the chest, abdominal cavity and skeletal system	K_B.W09	Assessment during the course
W02	Knows diagnostics of the vessels system and the usefulness of the interventional radiology in dentistry	K_F.W21	
U01	<p>Is able to differentiate inflammatory, neoplastic and traumatic processes of the faciocranium on the basis of the various diagnostic methods</p> <p>Knows the usefulness of ultrasonography in medicine and dentistry</p> <p>Knows the usefulness of CT and MR in medicine and dentistry</p> <p>Knows the contrast media used in medicine and dentistry - indications, kinds and complications</p>	K_A.U03	
U02	Knows how to diagnose pathological changes of the teeth, periodontium, jaw bones, temporo-mandibular joints and salivary gland on the X-rays and ultrasound	K_E.U05	Colloquium
K01	knows the regulations concerning the protection of the patients from X-rays. ALARA principle, be able to plan specialist consultations	K_K05	Assessment during the course
K02	knows the regulations concerning the protection of himself and staff from X-rays	K_K05	
K03	develops an effective relationship with patients and keeps patients' medical records	K_K03	

Table presenting learning outcomes of the subject/module in relation to the form of classes									
No.	SYMBOL (referring the standards) ZEK	Type/s of training							
		Lecture	Seminar	Practical classes	Clinical classes	Other...
1.	K_B.W09	X	X		X				
2.	K_F.W21	X	X		X				
3.	K_A.U03	X	X		X				
4.	K_E.U05	X			X				
5.	K K05				X				
6.	K_K03				X				
Module contents no.	Description of teaching programme			No. of hours			References to learning outcomes		
TK 01	X-ray diagnostics of the diseases of the chest. Anatomy of the chest. Diagnostics of the pulmonary diseases. Specific and non-specific pneumonias, abscesses, complications.			L	- 1 h		W01		
TK 02	Heart defects, circulatory failure, coronary disease - X-ray examination methods and different diagnostic procedures.			S	-2 h		W01, K 01,02,03		
TK 03	Some aspects of the diagnostic imaging of the urinary tract.			S	- 2 h		W01, U01, K01		
TK04	Imaging diagnostics of abdominal illnesses - efficiency of the imaging methods in diagnostics. Symptoms of acute abdomen", traumas and enteritis.			S	- 2 h		W01, K01,02,03		
TK05	Endodontic treatment on intra-oral X-ray images. Complications of endodontic treatment.			L	- 1 h		W01,02, U01,02, K01		
TK06	X-Ray diagnostics in periodontitis - intraoral X-rays and pantomogrammes			S	- 2 h		U02		
TK07	Diagnostics of the dental and maxillo-facial traumas			L	- 1 h		U 02, K01		
TK08	X-rays in orthodontics and cephalometry			S	- 2h		U02, K01		
TK09	Diagnostics in prosthetics (X-rays, US, MR)			S	- 2 h		U02, K01,03		
TK10	X-ray diagnostic in pedodontics			S	- 2 h		U02, K01,03		
TK11	Diagnostics of salivary glands - X-rays, CT and MR			L	- 1 h		U01, U02		
TK12	Diagnostics of temporo-mandibular joints X-rays, CT, MR, US			L	- 1 h		U01, U02		
TK13	Diagnostics of maxillo-facial malignant and benign neoplasms as well as cysts			L	- 1 h		U01, U02 W02		

TK14	Benign and malignant tumours in radiological images	S - 2 h RZC - 1 h	U01, U02
TK15	Algorithms of radiological diagnostics in dental practice - inflammatory processes, traumas and tumours	L - 1 h S - 2 h RZC - 2 h	U01, K01,03
TK16	Diagnostics of the pharynx, digestive and biliary tracts	S - 2 h RZC - 1 h	W01, K01,03
TK17	Interventional radiology in dentistry	L - 1 h S - 2 h	W02, U01, K01
TK18	Chosen problems of the chest and abdominal neoplasms in the context of maxillo-facial tumours	S - 1 h RZC - 2 h	W01, U01, K01
TK19	Contrast media in radiology - indications, kinds and complications	L - 1 h S - 2 h	U01, K01,02,03
TK 20	Prophylactic programs in medicine	L - 1 h	W01
TK 21	CBCT of the faciocranium	L - 1 h S - 2 h RZC - 2 h	U02, K01
TK 22	Diagnostic algorithms in tumours, otitis and fractures of the osseous system	L - 1 h S - 2 h RZC - 1 h	U01,02
TK 23	Radiological diagnostics of the multi-organ changes of the dental origin	S - 1 h RZC - 1 h	W01, U01, U02, K01, K02

Booklist

Obligatory literature:

1. Essentials of Dental Radiography and Radiology - Eric Whaites

Supplementary literature:

1. Exercises in Oral Radiology and Interpretation - Robert Langlais

Student's workload (balance sheet 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	89		
Time spent on preparation to seminars/ practical classes	30		
Time spent on reading recommended literature	3		
Time spent on writing report/making project	0		
Time spent on preparing to colloquium/ entry test	8		
Time spent on preparing to exam	15		
Other			
Student's workload in total	145		
ECTS credits for the subject (in total)	5		

Remarks

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...