Pomeranian Medical University in Szczecin

SYLLABUS of the MODULE (SUBJECT)
General Information

Module title: Radiology	
Module type	Obligatory
Faculty PMU	Faculty of Medicine and Dentistry
Major	Medicine
Level of study	long-cycle (S2J)
Mode of study	full-time studies
Year of studies, semester	year 4, semester VII/VIII
ECTS credits (incl. semester breakdown)	6
Type/s of training	lectures (10h) /seminars (25h)/ practical (50h)
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. med. Wojciech Poncyljusz, wojciech.poncyljusz@pum.edu.pl
Tutor responsible for the module	dr hab. n. med. Marcin Sawicki, marcin.sawicki@pum.edu.pl
Department's/ Clinic's/ Unit's website	https://www.pum.edu.pl/wydzialy/wydzial-lekarski/zaklad-diagnostyki-obrazowej-i-radiologii-interwenycznej/informacje-dla-studentow
Language	English

Detailed information

Module objectives		
Prerequisite /essential requirements	Knowledge	Knowledge of the anatomy and the basics of pathology, which will help the student to understand the diagnostic methods used
	Skills	The ability to associate facts (symptoms)
	Competences	Sensitivity to the patient's needs, friendliness, problem-solving in a team

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 causes, symptoms, principles of diagnosis and therapeutic management in relation to the most common diseases requiring surgical intervention, taking into account the distinctiveness of childhood, including in particular: a) acute and chronic diseases of the abdominal cavity, b) chest diseases, c) limb and head diseases, bone fractures and organ injuries	K_F.W1	ET
W02	knows the principles of qualifying and performing basic surgical procedures and invasive diagnostic and therapeutic procedures;	K_F.W3	ET
W03	has knowledge in the field of contemporary imaging studies, in particular knows: a) radiological symptomatology of basic diseases, b) instrumental methods and imaging techniques used to perform therapeutic procedures, c) indications, contraindications and preparation of patients for particular types of tests imaging and contraindications to the use of contrast agents.	K_F.W10	ET

W04	knows and understands the causes, symptoms, principles of diagnosis and therapeutic management in relation to the most common diseases of the central nervous system in the field of: a) swelling of the brain and its consequences, with particular emphasis on emergencies, b) other forms of intracranial tightness with their consequences c) craniocerebral injuries, d) CNS vascular defects, e) CNS neoplastic tumors, diseases of the spine and spinal cord	K_F.W13	ET
U01	assesses the result of a radiological examination in the scope of the most common types of fractures, especially those of long bones	K_E.U7	ET
K01	accepts the need for ethical standards	K_K.01	ET
K02	understands the concept and need of responsibility for the entrusted good	K_K.02	ET

Table presenting LEARNING OUTCOMES in relation to the form of classes

No. of learning outcome	Learning outcomes	Type of training			
		Lecture	Seminar	Practical classes	Other forms
W01	K_F.W1	x	x		
W02	K_F.W3	x	x		
W03	K_F.W10	x	x		
W04	K_F.W13	x	x		
U01	K_E.U7			x	
K01					x
K02					x

Table presenting TEACHING PROGRAMME

No. of a teaching programme	Teaching programme	No. of hours	References to learning outcomes
Winter and summer semester			
	Lectures		

TK01	Basics of ultrasound diagnostics	2	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK02	Fundamentals of MRI diagnostics	2	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK03	Fundamentals of X-ray diagnostics	2	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK04	Basics of diagnostics by computed tomography	2	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK05	Basics of interventional radiology	2	K_F.W3 K_F.W4 K_F.W10 K_F.U7
Seminars			
TK01	Radiographics 1	2,5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK02	Radiographics 2	2,5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK03	Ultrasonography 1	2,5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK04	Ultrasonography 2	2,5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK05	Computed Tomography 1	2,5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK06	Computed Tomography 2	2,5	K_F.W3 K_F.W4 K_F.W10 K_F.U7

TK07	Magnetic Resonance Imaging 1	2,5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK08	Magnetic Resonance Imaging 2	2,5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK09	Vascular imaging	2,5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK10	Interventional radiology	2,5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
Practical classes			
TK01	X-ray diagnostics	10	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK02	Computed tomography	10	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK03	Magnetic resonance imaging	10	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK04	Ultrasound	10	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK05	Mammography	5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK06	Interventional radiology	5	K_F.W3 K_F.W4 K_F.W10 K_F.U7

Booklist
Obligatory literature:
"Getting Started in Clinical Radiology. From Image to Diagnosis" George W. Eastman, Christoph Wald, Jane Crossin

Supplementary literature:
"Brant and Helms' Fundamentals of Diagnostic Radiology" Jeffrey Klein, Emily N. Vinson, William E. Brant, Clyde A. Helms

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	85
Time spent on preparation to seminars/ practical classess	110
Time spent on reading recommended literature	120
Time spent on writing report/making project	0
Time spent on preparing to colloqium/ entry test	0
Time spent on preparing to exam	120
Other …..	0
Student's workload in total	435
ECTS credits for the subject (in total)	6
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
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…