## SCHEDULE OF CLASSES General information

CLASS name: RADIOLOGY			
Type of classes	Obligatory		
PUM Department	Faculty of Medicine		
Field of study	Medical		
Specialty	Not applicable		
Study level	uniform master's studies		
Form of studies	stationary		
Year of study / semester of study	Year IV, block		
Number of assigned ECTS credits	6		
Forms of conducting classes (number of hours)	Lectures 10 hours, seminars 35 hours, exercises 50 hours		
Ways of verification and assessment of learning outcomes	□ credit with a grade:   □ descriptive   □ test   □ practical   □ oral		
Unit manager	Prof. dr hab. Wojciech Poncyljusz, med wojciech.poncyljusz@pum.edu.pl		

Didactic assistant professor or person responsible for the subject	Violetta Posio, MD, PhD (guardian of Polish students), violetta.posio@pum.edu.pl Dr hab. n. med. Marcin Sawicki (guardian of English-speaking students), msaw@pum.edu.pl
Name and contact details of the entity	Department of Imaging Diagnostics and Interventional Radiology zdori@pum.edu.pl tel. 91 4253434
Unit website	https://www.pum.edu.pl/wydzialy/wydzial- lekarski/zaklad-diagnostyki-obrazowej-i-radiologii- interwenycznej/informacje-dla-studentow
Language of conducting classes	Polish English

Detailed information

Objectives of th	ne classes	Getting to know the indications and contraindications for performing specific radiological procedures. Particular attention is paid to the advisability of performing a specific examination and the correctness of referring to diagnostic tests with the use of ionizing radiation
	Knowledge	Knowledge of the anatomy and the basics of pathology, which will help the student to understand the diagnostic methods used
Prerequisites for	Skills	The ability to associate facts (symptoms)
	Social competence s	Sensitivity to the patient's needs, friendliness, problemsolving in a team

## **LEARNING OUTCOMES**

no. learning effect	A student who passed the CLASSES knows / knows / is able to:	SYMBOL (reference to) learning outcomes for the field of study	The method of verifying the effects Learning*
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: and) acute and chronic diseases of the abdominal cavity, b) chest diseases, c) limb and head diseases, bone fractures and organ injuries	K_F.W1	EU
W02	knows the principles of qualifying and performing basic surgical procedures and invasive diagnostic and therapeutic procedures;	K_F.W3	EU
W03	has knowledge in the field of contemporary imaging studies, in particular knows:  and) radiological symptomatology of basic diseases, b) instrumental methods and imaging techniques used to perform therapeutic procedures, indications, contraindications and preparation of patients for particular types of tests imaging and contraindications to the use of contrast agents	K_F.W10	EU
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:     and) 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) CSN vascular defects,     e) CSN neoplastic tumors,     diseases of the spine and spinal cord	K_F.W13	EU

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	EU
K01	accepts the need for ethical standards	K_K.01	EU
K02	understands the concept and need of responsibility for the entrusted good	K_K.02	EU

Table of	Table of Learning outcomes in relation to the form of activity							
		Form of classes						
no. learnin g effect	Learning outcomes	Lectur e	Semin ar	Exercis es	Clinical exercis es	Simulatio ns	E- learning	Othe r form s
W01	K_F.W1	х	х					
W02	K_F.W3	х	х					
W03	K_F.W10	x	х					
W04	K_F.W13	х	х					
U01	K_E.U7			х				
K01								х
K02								х

TABLE OF P	TABLE OF PROGRAM CONTENTS				
no. program content	Program content		Relation to learning outcomes for the CLASSES		
UNIT		•			
	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	Imaging diagnosis of chest diseases	2.5	K_F.W3 K_F.W4 K_F.W10 K_F.U7		
TK02	Imaging diagnosis of diseases of the abdominal cavity	2.5	K_F.W3 K_F.W4 K_F.W10 K_F.U7		
TK03	Imaging diagnosis of breast diseases	2.5	K_F.W3 K_F.W4 K_F.W10 K_F.U7		

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TK04	Imaging diagnostics of heart and vascular diseases	2.5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK05	Imaging diagnosis of diseases of the musculoskeletal system	2.5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK06	Imaging diagnostics of urinary tract diseases	2.5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK07d	Imaging diagnostics in paediatrics	2.5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK08	Diagnostic neuroradiology	2.5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK09	Interventional neuroradiology	2.5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK10	Interventional non-vascular radiology	2.5	K_F.W3 K_F.W4 K_F.W10 K_F.U7
	Exercises		
TK01	X-ray diagnostics	11	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK02	Computed tomography	11	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK03	Magnetic resonance imaging	11	K_F.W3 K_F.W4 K_F.W10 K_F.U7

TK04	Ultrasound	11	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK05	Mammography	6	K_F.W3 K_F.W4 K_F.W10 K_F.U7

Recommended literature:
Basic literature
1RADIOLOGY Imaging diagnostics X-ray, CT, USG, MRI and nuclear medicine edited by B. Pruszyński
2. Ultrasound diagnostics edited by H Kramer and W. Dobriński
Supplementary literature
"Getting Started in Clinical Radiology. From Image to Diagnosis"     George W. Eastman, Christoph Wald, Jane Crossin
2.

Student workload		
	Student load [h]	
Form of student workload (participation in classes, activity, preparation of reports, etc.)	In the teacher's opinion (opinion)	
Contact hours with the teacher	85	
Preparation for exercises / seminar	110	
Reading the indicated literature	120	

Writing a report from the laboratory / exercises / preparation of a project / paper, etc.	0
Preparation for a test / postcard	120
Preparation for the exam	
Another	
Total student workload	435
ECTS credits	6
Comments	