



# Pomeranian Medical University in Szczecin

## SYLLABUS of the MODULE (SUBJECT)

### General Information

Code		Title	Radiology
Module type			<i>Obligatory</i>
Faculty			<i>Faculty of Medicine (WLA)</i>
Field of study			<i>medicine (KL )</i>
Major			<i>Not applicable</i>
Level of study			<i>II level/ long-cycle (S2J)</i>
Mode of study			<i>intramural</i>
Year of study			<i>IV</i>
Semester			<i>Block system</i>
ECTS points			<i>6</i>
Types of training			<i>Seminars 30h practical 55h (85 h in total) /exam</i>
Tutor responsible for the module			Prof. dr hab. Anna Walecka zdori@pum.edu.pl
Tutors conducting the subject			Title/degree/ e-mail address zdori@pum.edu.pl
WWW			www.pum.edu.pl
Language			Polish, English

### Detailed information

Module objectives		Becoming acquainted with the indications and contraindications in order to perform various radiological procedures. Particular attention is paid to the desirability of performing a particular test and the accuracy of management for diagnostic tests using ionizing radiation.
Prerequisite /essential requirements	Knowledge	<i>Knowledge of anatomy and pathology basis, which will help the student to understand the methods of diagnosis</i>
	Skills	<i>The ability to associate facts (symptoms)</i>
	Competences	<i>friendliness and cooperation, team skills</i>

Description of the learning outcomes for the subject /module			
Number of learning outcome	Student, who has passed the (subject) Knows /is able to /can:	SYMBOL (referring the standards) EKK	Method of verification of learning outcomes
KL2JPW01	knows and understands causes, symptoms, diagnosis and therapeutic procedures with regard to most frequent surgical diseases that require surgical intervention, taking into consideration differences of childhood, in particular: a) acute and chronic diseases of the abdominal cavity b) diseases of the chest c) diseases of the limbs and head bone fractures and injuries to organs	K_F.W1	Short written tests during the classes; Final Test Practical exam (reading images) Final exam (oral form)
KL2JPW02	knows rules of qualification for performance of and the most frequent complications after basic operative procedures and invasive diagnostic/treatment procedures	K_F.W3	
KL2JPW03	knows rules of operation-related safety, preparation of , patients for operation, performance of general and local anesthesia	K_F.W4	
KL2JPW04	knows issues of modern imaging methods, in particular: a) radiological symptomatology of main diseases b) instrumental methods and imaging techniques used for performance of therapeutic procedures indications, c) contra-indications and preparation of patients for certain kinds of imaging examination and contra-indications to the application of contrast media	K_F.W10	
KL2JPW05	knows and explains the causes, symptoms, diagnostic and therapeutic procedures of the most frequent central nervous system	K_F.W13	

	diseases , incl. a) cerebral edema and its consequences , in particular emergency states, b) other forms of intracranial stenosis and their consequences , c) cranio-cerebral trauma, d) vascular defects of central nervous system, e) neoplastic tumors of central nervous system, f) spondylopathy and myelopathy,		
KL2JPU01	adheres to rules of asepsis and antisepsis	K_F.U3	
KL2JPU02	evaluates result of radiography with regard to most frequent types of fracture, in particular fractures of long bones	K_F.U7	

**Matrix presenting the learning outcomes of the subject/module in relation to the form of classes**

Number of learning outcome	Student, who has passed the (subject) Knows /is able to /can:	Types of training							
		Lecture	Seminar	Laboratory classes	Project work	Clinical classes	Classes	Practical classes	Other
KL2JPW01	knows and understands causes,		x			x			
KL2JPW02	knows rules of qualification for		x			x			
KL2JPW03	knows rules of operation-related		x			x			
KL2JPW04	knows issues of modern imaging		x			x			
KL2JPW05	knows and explains the causes,		x			x			
KL2JPU01	adheres to rules of asepsis and		x			x			
KL2JPU02	evaluates result of radiography with		x			x			

**Module (subject) contents**

Symbol of teaching programme	Content of teaching programme	References to learning outcomes
TK_01	The most common pathologies of the brain and its diagnostic capabilities (images X-ray, magnetic resonance imaging (MRI), and treatment of aneurysms (aneurysm embolization)	K_F.W3 K_F.W4 K_F.W10 K_F.W13
TK_02	The most common chest pathologies/disorders and possibilities of examination for diagnosis.	K_F.W3 K_F.W4 K_F.W10
TK_03	The most common breast pathologies/disorders and possibilities of examination for diagnosis.	K_F.W3 K_F.W4 K_F.W10
TK_04	The most common musculoskeletal disorders/pathologies and its diagnoses.	K_F.W3 K_F.W4 K_F.W10 K_F.U7
TK_05	Disorders/pathologies of the vascular system and its diagnoses.	K_F.W3 K_F.W4 K_F.W10 K_F.W13 K_F.U7
TK_06	The most common pathologies/disorders of children, including the specific of childhood in particular:	K_F.W3 K_F.W4 K_F.W10

	d) acute and chronic diseases of the abdominal cavity, e) diseases of the chest, f) diseases of limbs and head. g)bone fractures and injuries of organs	K_F.U7 K_F.U3	
References and educational resources			
1.RADIOLOGIA Diagnostyka obrazowa Rtg,TK,USG, MR i medycyna nuklearna pod red. B. Pruszyńskiego			
2.Diagnostyka ultrasonograficzna pod red. H Kramera I W. Dobrińskiego			
3. "Getting Started in Clinical Radiology. From Image to Diagnosis" George W. Eastman, Christoph Wald, Jane Crossin,			
4. Khaled M. Elsayes, Sandra A. A. Oldham “Introduction to Diagnostic Radiology”. available on-line : <a href="http://accessmedicine.mhmedical.com/book.aspx?bookid=1562">http://accessmedicine.mhmedical.com/book.aspx?bookid=1562</a>			
Form of student’s activity (in-class participation; activeness, produce a report, etc.)	Workload [h]		
	Tutor	Student	Average
activities that require direct participation of tutors	85	85	85
Preparation to the classes	110	110	110
Reading of the indicated/specified literature	120	120	120
Report writing/project making	0	0	0
Time spent to prepare for the exam	120	120	120
Other			
Student’s workload in total	435	435	435
ECTS points for the subject	6		
Remarks at the end			

Methods of assessment, for example:

E – exam- problem resolving

S – verifying of practical skills

R – report

D – discussion

P – presentation

Others-