



Summer Semester													
DEPARTMENT OF RADIOLOGY	20					60							
TOTAL per year: 80													
Educational objectives (max. 6 items)													
C1. To get acquainted with the specificity of X-ray, ultrasound, CT and MR laboratories													
C2. To gain basic knowledge regarding conventional diagnostic imaging using X-ray and ultrasonography													
C3. To gain basic knowledge regarding diagnostic imaging using new methods such as CT and MRI													
C4. To gain basic knowledge regarding interventional radiology													
Education result matrix for module/course in relation to verification methods of the intended education result and the type of class													
Number of course education result	Number of major education result	Student who completes the module/course knows/is able to	Methods of verification of intended education results (forming and summarising)	Form of didactic class <i>**enter the abbreviation</i>									
W.01	A.W2	Knows human topographic and functional anatomy	Oral credit, Written examination (test)	L,CC									
W.02	A.W3	Describes topography of particular organs	Oral credit, Written examination (test)	L,CC									
W.03	B.W6	Knows natural and artificial sources of ionizing radiation and its interactions with environment	Oral credit, Written examination (test)	L,CC									
W.04	B.W8	Knows physical background of non-invasive diagnostic methods	Oral credit, Written examination (test)	L,CC									
W.05	E.W3	Knows the causes, symptoms, as well as diagnostic management in common pediatric diseases	Oral credit, Written examination (test)	L,CC									
W.06	E.W7	Knows and understands the causes, symptoms and diagnostic management in the most common adult internal diseases including: a) circulatory system b) respiratory system c) alimentary system e) kidneys and urinary tracts g) rheumatoidal diseases	Oral credit, Written examination (test)	L,CC									



W.07	E.W14	Knows the causes, symptoms, as well as diagnostic management in common diseases of the nervous system	Oral credit, Written examination (test)	L,CC
W.08	E.W24	Knows the rules of early cancer diagnosis and the rules of screening methods used in oncology	Oral credit, Written examination (test)	L,CC
W.09	E.W32	Knows and understands the causes, symptoms and diagnostic management in the most common bacterial, viral, fungal and parasitic diseases	Oral credit, Written examination (test)	L,CC
W.10	F.W1	Knows and understands the causes, symptoms and diagnostic management in the most common pediatric diseases requiring surgical treatment including: a) acute and chronic abdominal pathologies b) chest diseases c) diseases of limbs and head d) bone fractures and injuries of internal organs	Oral credit, Written examination (test)	L,CC
W.11	F.W3	Knows the rules of qualification and performing of basic diagnostic procedures	Oral credit, Written examination (test)	L,CC
W.12	F.W10	Knows the problems of modern diagnostic imaging particularly: a) radiological symptomatology of the most common diseases b) methods and diagnostic techniques used in interventional radiology c) indications, contraindications and preparation of patients for imaging studies, including contraindications for contrast agents used in radiology	Oral credit, Written examination (test)	L,CC
W.13	F.W12	Knows the diagnostic management in head and neck cancers	Oral credit, Written examination (test)	L,CC
U.01	A.U1.	Knows human topographic anatomy and uses correct anatomical terminology	SHOW	L,CC
U.02	A.U4	Interpretes relations between anatomical structures based on imaging studies such as X-rays, CT and MRI	SHOW	L,CC
U.03	B.U2	Estimates the harmfulness of a dose of ionizing radiation and uses the rules of radiation	SHOW	L,CC



U.04	D.U6.	protection Informs a patient about the aim and risk of a diagnostic procedure and how it is performed, gets patient's permission for an examination	PERFORMANCE	L,CC
U.05	E.U.5	Can choose an appropriate diagnostics management including X-rays, ultrasound, CT and MRI in a certain patient's case	SHOW	
U.06	E.U12	Conducts differential diagnosis regarding the most common pediatric and adult diseases	SHOW	L,CC
U.07	E.U16	Plans the diagnostic management	PERFORMANCE	L,CC
U.08	F.U7	Interpretes the results of imaging studies regarding the most common types of bone fractures	SHOW	L,CC

** L - lecture; SE - seminar; AC – auditorium classes; MC – major classes (non-clinical); CC – clinical classes; LC – laboratory classes; SCM – specialist classes (magister studies); CSC – classes in simulated conditions; FLC – foreign language course; PCP practical classes with patient; PE – physical education (obligatory); VP – vocational practice; SS – self-study, EL – E-learning .

Please mark on scale 1-5 how the above effects place your classes in the following categories:
communication of knowledge, skills or forming attitudes:

Knowledge: +++

Skills: ++

Student's amount of work (balance of ECTS points)

Student's workload (class participation, activity, preparation, etc.)	Student Workload (h)
--	----------------------

1. Contact hours:	80
-------------------	----

2. Student's own work (self-study):	126
-------------------------------------	-----

Total student's workload	206,0
--------------------------	-------

ECTS points for module/course	6,5
-------------------------------	-----

Comments

Content of classes (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)

Lectures

- Introduction to diagnostic imaging
- Chest part I
- Chest part II
- Heart, large vessels, mediastinum
- Alimentary system



- Urinary system
- Vessels, Interventional radiology
- Neuroradiology
- Musculoskeletal system part I
- Musculoskeletal system part II

Seminars

CLASSES:

- Demonstration of the equipment in the radiology department, physical background of imaging methods, contrast media
demonstration of X-rays, CT, ultrasonography and MR equipment in the radiology department
- Chest part 1
- Chest part 2
- Chest part 3
- Alimentary tract
- Abdomen
- Urinary system
- Neuroradiology- brain
- Neuroradiology – spine
- Musculoskeletal system part 1
- Musculoskeletal system part 2
- Pelvis, breast
- Interventional radiology. Cardiovascular imaging
- Credit

Other

Basic literature (list according to importance, no more than 3 items)



1. William Herring. Learning radiology – recognizing the basics – Elsevier 2012 (second edition)

Didactic resources requirements (e.g. laboratory, multimedia projector, other...)

MULTIMEDIA, PROJECTOR

Preliminary conditions (minimum requirements to be met by the student before starting the module/course)

1. Basic knowledge of human anatomy and pathology
2. Basic knowledge of physics (types of radiation)

Conditions to receive credit for the course (specify the form, criteria and conditions of receiving credit for classes included in the module/course, admission terms to final theoretical or practical examination, its form and requirements to be met by the student to pass it and criteria for specific grades).

Each student is obliged to make up all missed classes by joining to a different student group. If this is not possible he or she should prepare a PowerPoint presentation on the topic chosen by his/her teacher. The same works for all rector's days or dean's hours.

Grade:	Criteria for course
Very Good (5.0)	min 85% of positive answers in the oral credit
Good Plus (4.5)	min 80% of positive answers in the oral credit
Good (4.0)	min. 75% of positive answers in the oral credit
Satisfactory Plus (3.5)	min.70% of positive answers in the oral credit
Satisfactory (3.0)	min. 60% of positive answers in the oral credit

Grade:	Criteria (only for courses/modules ending with an examination)
Very Good (5.0)	min 85% of positive answers in the test
Good Plus (4.5)	min 80% of positive answers in the test
Good (4.0)	min. 75% of positive answers in the test
Satisfactory Plus (3.5)	min.70% of positive answers in the test
Satisfactory (3.0)	min. 60% of positive answers in the test

Name and address of module/course teaching unit, contact: telephone and e-mail address

Department of Radiology
Medical University Hospital
Borowska 213, 50-556 Wrocław
T: +48 71 733 16 68, F: +48 71 733 16 89

Coordinator / Person responsible for module/course, contact: telephone and e-mail address

Prof. dr hab. Marek Szaśiadek/ Radiology/ marek.sasiadek@umed.wroc.pl /71 733 16 68

<i>List of persons conducting specific classes:</i>	<i>degree/scientific or professional title</i>	<i>Discipline</i>	<i>Performer profession</i>	<i>Form of classes</i>
Marek Szaśiadek	Prof. Dr hab.	radiologist	Prof. zwycz.	lectures
Anna Zimny	Dr hab.	radiologist	adiunkt	clinical classes
Joanna Bładowska	Dr hab.	radiologist	adiunkt	clinical classes
Maciej Guziński	Dr hab.	radiologist	adiunkt	clinical classes
Jacek Kurcz	Dr n. med.	radiologist	adiunkt	clinical classes
Przemysław Podgórski	Lek.	radiologist	asystent	clinical classes
Anna Kołtowska	Dr n. med.	radiologist	adiunkt	clinical classes

Date of Syllabus development

02.07.2018r.

Syllabus developed by

...dr hab. Anna Zimny....

Signature of Head of teaching unit

.....prof. dr hab. Marek Szaśiadek.....

Signature of Faculty Dean


Wrocław Medical University
FACULTY OF MEDICINE
VICE-DEAN FOR STUDIES
Prof. Andrzej Mandrich, PhD


Uniwersytet Medyczny we Wrocławiu
KATEDRA RADIOLOGII
prof. dr hab. Marek Szaśiadek