



Syllabus 2019/2020														
Description of the course														
Module/Course	RADIOLOGY AND DIAGNOSTIC IMAGING			Group of detailed education results										
				Group code (A+B+D+E+F)	Group name MORPHOLOGICAL SCIENCE SCIENTIFIC BASICS OF MEDICINE BEHAVIORAL SCIENCES GENERAL CLINICAL SCIENCES (not surgical) APPLICABLE CLINICAL SCIENCES (surgical)									
Faculty	MEDICINE													
Major	MEDICINE													
Specialties	NOT APPLICABLE													
Level of studies	Uniform magister studies X* 1 st degree studies <input type="checkbox"/> 2 nd degree studies <input type="checkbox"/> 3 rd degree studies <input type="checkbox"/> postgraduate studies <input type="checkbox"/>													
Form of studies	x full-time <input type="checkbox"/> part-time													
Year of studies	IV	Semester		<input type="checkbox"/> Winter X Summer										
Type of course	X obligatory <input type="checkbox"/> limited choice <input type="checkbox"/> free choice / elective													
Course	x major <input type="checkbox"/> basic													
Language of instruction	<input type="checkbox"/> Polish X English <input type="checkbox"/> other													
* mark <input type="checkbox"/> with an X														
Number of hours														
Form of education														
Unit teaching the course	Lectures (L)	Seminars (SE)	Auditorium classes (AC)	Major Classes – not clinical (MC)	Clinical Classes (CC)	Laboratory Classes (LC)	Classes in Simulated Conditions (CSC)	Practical Classes with Patient (PCP)	Specialist Classes – magister studies (SCM)	Foreign language Course (FLC)	Physical Education obligatory (PE)	Vocational Practice (VP)	Self-Study (Student's own work)	E-learning (EL)
Winter Semester														
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) rheumatoid 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	Oral credit, Written examination	L,CC										



		of screening methods used in oncology	(test)	
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 protection	SHOW	L,CC
U.04	D.U6.	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	SHOW	L,CC



		including X-rays, ultrasound, CT and MRI in a certain patient's case		
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	6,0
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



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

- Musculoskeletal system part 1
- Musculoskeletal system part 2

- Pelvis, breast

- Interventional radiology. Cardiovascular imaging

- Medical Simulation Centre

- Medical Simulation Centre

- 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.

Conditions to receive credit for the course: positive grade from oral test during classes which is condition of accession to the exam.

Grade:	Criteria for credit
Very Good (5.0)	min 95% of positive answers in the oral credit
Good Plus (4.5)	min 85% of positive answers in the oral credit
Good (4.0)	min. 75% of positive answers in the oral credit
Satisfactory Plus (3.5)	min.65% of positive answers in the oral credit
Satisfactory (3.0)	min. 55% of positive answers in the oral credit
Grade:	EXAM Criteria (only for courses/modules ending with an examination) TEST: 60 QUESTIONS
Very Good (5.0)	54-60 points
Good Plus (4.5)	49-53 points
Good (4.0)	44-48 points
Satisfactory Plus (3.5)	39-43 points
Satisfactory (3.0)	34-38 points

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 Sasiadek/ 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 Sasiadek	Prof. Dr hab.	radiologist	academic teacher	L
Anna Zimny	Dr hab.	radiologist	academic teacher	CC
Joanna Bladowska	Prof. Dr hab.	radiologist	academic teacher	CC
Maciej Guziński	Dr hab.	radiologist	academic teacher	CC
Jacek Kurcz	Dr n. med.	radiologist	academic teacher	CC
Przemysław Podgórski	Lek.	radiologist	academic teacher	CC
Anna Kołtowska	Dr n. med.	radiologist	academic teacher	CC
Michał Wolańczyk	Dr n. med.	radiologist	academic teacher	CC

Date of Syllabus development


02.07.2019r.

Syllabus developed by

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

Signature of Head of teaching unit

.....prof. dr hab. Marek Sasiadek.....

Signature of Faculty Dean
Wrocław Medical University
FACULTY OF MEDICINE
VICE-DEAN FOR STUDIES IN ENGLISH

Prof. Andrzej Hendrich, PhD


Uniwersytet Medyczny we Wrocławiu
KATEDRA RADIOLOGII
kierownik
prof. dr hab. Marek Sasiadek