UNIWERSYTET MEDYCZNY
IM. PIASTÓW ŚLĄSKICH WE WROCŁAWIU

Appendix 5
to Resolution No. 15630
of Senate of Wroclaw Medical University
of 30 March 2016

Syllabus 2020/2021

Description of the course

Module/Course	Internal Diseases (1)	Group of detailed education results	
		Group code E	Group name Non-invasive clinical science
Faculty	Medicine		
Major	medicine		
Specialties	Not applicable		
Level of studies	Uniform magister studies X * 1st degree studies ☐ 2nd degree studies ☐ 3rd degree studies ☐ postgraduate studies ☐		
Form of studies	X full-time ☐ part-time		
Year of studies	IV	Semester	X Winter X Summer
Type of course	X obligatory ☐ limited choice ☐ free choice / elective		
Course	☐ major X basic		
Language of instruction	☐ Polish X English ☐ other		

* mark ☐ 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														
Dept. and Clinic of Internal Medicine, Occupational Diseases, Hypertension and Clinical Oncology	3				20									
Dept. and Clinic of Cardiology	3				10									

Dept. and Clinic of Nephrology and Transplantation Medicine	3				0									
Dept. and Clinic of Pulmonology and Lung Cancers	3				0									
Dept. and Clinic of Rheumatology and Internal Medicine	3				0									
Summer Semester														
Dept. and Clinic of Internal Medicine, Occupational Diseases, Hypertension and Clinical Oncology	3				20									
Dept. and Clinic of Cardiology	3				15									
Dept. and Clinic of Nephrology and Transplantation Medicine	3				0									
Dept. and Clinic of Pulmonology and Lung Cancers	3				0									
Dept. and Clinic of Rheumatology and Internal Medicine	3				0									
TOTAL per year:														
	30				65									

Educational objectives (max. 6 items)

C1 Student should get acquainted with etiopathogenesis, symptomatology, diagnosis and treatment of internal diseases (cardiovascular diseases, pulmonary diseases, kidney diseases, rheumatic diseases).

C2 Knowledge of preventive measures against most common internal diseases.

C3 Student should get acquainted with keeping medical records.

C4 Student should get skills of history taking, an accurate physical examination with proper interpretation of disclosed abnormalities.

C5 Student should get acquainted with basic laboratory tests and diagnostic procedures, including imaging examinations and the interpretation of disclosed abnormalities in common disease entities.

C6 Student should get skills of differential diagnosis, performing basic diagnostic examinations, as well as the establishment of diagnosis and treatment plan in common internal diseases.

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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 summarizing)	Form of didactic class ***enter the abbreviation*
K 01	E.W1	define epidemiology of the most common internal diseases	test/oral answer	L, CC
K 02	E.W7	describe etiology, symptomatology, diagnostic and therapeutic procedures in cardiovascular, pulmonary, kidney, and rheumatic diseases		
K 03	E.W40	present the theoretical and practical basis of laboratory diagnostics		
K 04	E.W41	understand the possibilities and limitations of laboratory tests in emergencies		
S 01	E.U1	take clinical interview	direct observation of clinical skills	CC
S 02	E.U3	perform a thorough and accurate physical examination		
S 03	E.U13	assess and describes psychosomatic state of a patient		
S 04	E.U14	recognize life-threatening conditions		
S 05	E.U16	plan diagnostic and therapeutic procedures in the most common diseases in adults	direct observation of planning the procedures	
S 06	E.U24	interpret the results of laboratory findings	verification of interpreting laboratory findings	
S 07	E.U29	perform basic medical procedures	direct observation of clinical skills	

** 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: 5
Skills: 5

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

Student's workload (class participation, activity, preparation, etc.)	Student Workload (h)
1. Contact hours:	95
2. Student's own work (self-study):	32,5
Total student's workload	127,5
ECTS points for module/course	3,5
Comments	

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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 30 hours

Dept. and Clinic of Internal Medicine, Occupational Diseases, Hypertension and Clinical Oncology

Winter semester – 3 hours

The emergencies in internal and occupational diseases

Secondary and hormonal induced hypertension

Summer semester – 3 hours

Hypertension in pregnancy

Environmental and demographic threats in XXI century

Dept. and Clinic of Cardiology

Winter semester – 3 hours

Cardiogenic shock

Atrial fibrillation

Summer semester – 3 hours

Invasive diagnostics and intervention treatment

Valvular heart disease

Dept. and Clinic of Nephrology and Transplantation Medicine

Winter semester – 3 hours

Glomerulonephritis – diagnosis and therapy

Diabetic kidney disease, interstitial nephritis, urinary tract infection and drug-induced nephropathy

Summer semester – 3 hours

Renal replacement therapy – peritoneal dialysis, hemodialysis, kidney transplantation

Acute and chronic kidney disease

Dept. and Clinic of Pulmonology and Lung Cancers

Winter semester – 3 hours

Dyspnea and respiratory insufficiency

Chest pain and pleural effusion

Summer semester – 3 hours

Cough and pneumonia

Daytime sleepiness and sleep breathing disorders

Dept. and Clinic of Rheumatology and Internal Disease

Winter semester – 3 hours

Systemic connective tissue diseases; rheumatoid arthritis, systemic lupus erythematosus, systemic sclerosis, polymyositis, mixed connective tissue disease – pathogenesis, clinical picture, diagnostics, treatment

Summer semester – 3 hours

Seronegative spondyloarthropathies

Seminars NA

Practical classes 65 hours

Dept. and Clinic of Internal Medicine, Occupational Diseases, Hypertension and Clinical Oncology

Winter semester – 20 hours

- Assessment of the cardiovascular risk. ABPM – ambulatory blood pressure monitoring and its interpretation
- Basic laboratory tests and diagnostic imaging in hypertension. The assessment of target organ damage of hypertension. Advanced hormonal and invasive diagnostics performed in patients with resistant hypertension

- Rules of conduct in specific therapeutic groups of patients with hypertension (metabolic syndrome, diabetes, stroke, pregnancy, old age, chronic kidney disease)
- Rules for selection of drugs, depending on the profile of the patient – causal treatment
- Individualization of pharmacotherapy in accordance with the principles of EBM
- Hypertensive emergencies
- A patient with refractory/resistant hypertension – causes, diagnosis and treatment (with special concentration on OSA and polysomnography)
- Stroke. Assessment of the patient's consciousness by the NIHSS and Glasgow Coma Scale.
- DIC – principles of diagnosis and treatment, haemorrhagic diathesis, including iatrogenic – overdose of anticoagulants, bleeding in a patient treated with anticoagulant
- Respiratory and metabolic acidosis. Respiratory and metabolic alkalosis. Compensatory mechanisms. The principles of diagnosis, interpretation and therapy
- Emergencies in metabolic disorders – principles of diagnostic and therapeutic procedures

Summer semester – 20 hours

- Decompensated heart failure, diagnostics, risk factors for decompensation, hemodynamic classification, principles of pharmacotherapy
- Patient with dyspnoea, patient with tachyarrhythmia – algorithms and differential diagnosis
- Patient with fainting – diagnostic imaging, differentiation (vasovagal, neurogenic; arrhythmias, tachy-brady)
- Patient with loss of consciousness, patient with symptoms of shock
- Deep vein thrombosis. Pulmonary thromboembolism – diagnosis of conditions predisposing to thrombosis, principle of diagnosis, therapeutic procedures
- COPD exacerbation, exacerbation of asthma, pneumonia. Acute respiratory failure, sepsis – algorithms
- Patient with fever of unknown origin
- Dehydration and overhydration. Hyponatremia, hyperemia, hyperkaliemia, hypokalemia, hypocalcemia, hypercalcemia. Hypophosphatemia
- Patient with cachexia (iatrogenic and in oncology) – principles of prophylaxis and therapy

Dept. and Clinic of Cardiology

Winter semester – 10 hours

- Basic diagnostic methods used in modern cardiology: laboratory tests, electrocardiography, imaging tests
- Chronic coronary syndromes – pathophysiology, diagnostic and therapeutic procedures, invasive treatment and pharmacotherapy
- Acute coronary syndromes – pathophysiology, diagnostic and therapeutic procedures, invasive treatment and pharmacotherapy
- Supraventricular arrhythmias – pathophysiology, diagnostic and therapeutic procedures, invasive treatment and pharmacotherapy
- Atrial fibrillation - pathophysiology, diagnostic and therapeutic procedures, invasive treatment and pharmacotherapy

Summer semester – 15 hours

- Ventricular arrhythmias – pathophysiology, diagnostic and therapeutic procedures, invasive treatment and pharmacotherapy
- Basics of electrotherapy – pacemaker, implantable cardioverter-defibrillator, resynchronization system, invasive electrophysiological examination, ablation
- Chronic heart failure – pathophysiology, diagnostics, diagnostic and therapeutic procedures, pharmacotherapy

- Acute heart failure – pathophysiology, diagnostics, diagnostic and therapeutic procedures, pharmacotherapy

Other NA

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

1. Harrison's Principles of Internal Medicine. D Kasper et al. McGraw-Hill Medical 2018; 20th Edition
2. Davidson's Principles and Practice of Medicine. Stuart H. Ralston, Ian Penman, Mark Stachan, Richard Hobson, Elsevier 2018, 23rd Edition
3. Macleod's Clinical Examination. J. Alastair Innes, Anna R Dover, Karen Fairhurst. Elsevier 2018, 14th Edition

Additional literature and other materials (no more than 3 items)

Secondary sources with other didactic help: (not more than 3 items)

1. Kaplan's Clinical Hypertension. NM Kaplan, RG Victor MD, Lippincott Williams & Wilkins 2009, 10th edition
2. ESC Guidelines (https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines)
3. Annals of the Rheumatic Diseases /medical journal/

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

Access to the treatment rooms, multimedia projector, laptop.

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

Student should know the basics of anatomy, physiology, pathophysiology and pathomorphology, as well as the basics of propedeutics of internal diseases.

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 med by the student to pass it and criteria for specific grades).

Each absence must be made up, including rector's days or dean's hours.
Attendance at lectures and clinical classes, clinical skills, positive results of test and/or oral evaluation (grade).

Grade:	Criteria for course
Very Good (5.0)	Knowledge of issues related to the pathogenesis, symptomatology, treatment and prevention of internal diseases is estimated at 92%. The student interprets medical research, makes a diagnosis, suggests treatment very well.
Good Plus (4.5)	Knowledge of issues related to the pathogenesis, symptomatology, treatment and prevention of internal diseases is estimated at 84%. The student interprets medical research, makes a diagnosis, suggests treatment above well.
Good (4.0)	Knowledge of issues related to the pathogenesis, symptomatology, treatment and prevention of internal diseases is estimated at 76%. The student interprets medical research, makes a diagnosis, suggests treatment well.
Satisfactory Plus (3.5)	Knowledge of issues related to the pathogenesis, symptomatology, treatment and prevention of internal diseases is estimated at 68%. The student interprets medical research, makes a diagnosis, suggests treatment fairly well.
Satisfactory (3.0)	Knowledge of issues related to the pathogenesis, symptomatology, treatment and prevention of internal diseases is estimated at 60%. The student interprets medical research, makes a diagnosis, suggests treatment sufficiently.
Grade:	**Criteria for exam (if applicable)**
Very Good (5.0)	
Good Plus (4.5)	
Good (4.0)	
Satisfactory Plus (3.5)	
Satisfactory (3.0)	

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Name of unit teaching course:	**Dept. and Clinic of Internal Medicine, Occupational Diseases, Hypertension and Clinical Oncology**
Address	Borowska 213, 50-556 Wrocław
Phone	71 736 40 00
E-mail	kcz@usk.wroc.pl

Person responsible for course:	Anna Jodkowska, MD, PhD
Phone	71 736 40 00
E-mail	anna.jodkowska@umed.wroc.pl

List of persons conducting specific classes:	*degree/scientific or professional title*	*Discipline*	*Performer profession*	*Form of classes*
Arkadiusz Derkacz	Professor, MD, PhD	Internal diseases, angiology, cardiology	Physician, academic teacher	Lectures, clinical classes
Anna Skoczyńska	Professor, MD, PhD	Internal diseases, hypertensiology	Physician, academic teacher	Lectures, clinical classes
Adrian Doroszko	MD, PhD, Assoc. Prof.	Internal diseases, cardiology	Physician, academic teacher	Clinical classes
Anna Jodkowska	MD, PhD	Internal diseases, endocrinology, hypertensiology	Physician, academic teacher	Lectures, clinical classes
Helena Martynowicz	MD, PhD	Internal diseases, hypertensiology	Physician, academic teacher	Lectures, clinical classes
Maciej Podgórski	MD	Internal diseases, cardiology	Physician, academic teacher	Lectures, clinical classes
Jacek Polański	MD	Internal diseases, oncology	Physician, academic teacher	Clinical classes
Tomasz Matys	MD	Internal diseases in training	Physician, academic teacher	Clinical classes
Damian Gajecki	MD	Internal diseases in training	Physician, academic teacher	Clinical classes
Jakub Gawryś	MD	Internal diseases in training	Physician, academic teacher	Clinical classes
Jakub Mochol	MD	Internal diseases in training	Physician, academic teacher	Clinical classes

Name of unit teaching course:	**Dept. and Clinic of Cardiology**
Address	Borowska 213, 50-556 Wrocław
Phone	71 736 42 00
E-mail	kardiologia@umed.wroc.pl

Person responsible for course:	Prof. Andrzej Mysiak, MD, PhD
Phone	71 736 42 00
E-mail	kardiologia@umed.wroc.pl

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List of persons conducting specific classes:	*degree/scientific or professional title*	*Discipline*	*Performer profession*	*Form of classes*
Wiktor Kuliczkowski	MD, PhD, Assoc. Prof.	Internal diseases, cardiology	Physician, academic teacher	Lectures, clinical classes
Marcin Protasiewicz	MD, PhD, Assoc. Prof.	Internal diseases, cardiology	Physician, academic teacher	Lectures, clinical classes
Tomasz Witkowski	MD, PhD, Assoc. Prof.	Internal diseases, cardiology	Physician, academic teacher	Lectures, clinical classes
Konrad Kaaz	MD, PhD	Cardiology	Physician, academic teacher	Clinical classes
Małgorzata Kobusiak-Prokopowicz	MD, PhD	Internal diseases, cardiology	Physician, academic teacher	Clinical classes
Magdalena Cielecka-Prynda	MD, PhD candidate	Internal diseases, cardiology in training	Physician, academic teacher	Clinical classes
Dawid Bednarczyk	MD, PhD candidate	Cardiology in training	Physician, academic teacher	Clinical classes
Maciej Kabaj	MD, PhD candidate	Internal diseases in training	Physician, academic teacher	Clinical classes
Wojciech Kosowski	MD, PhD candidate	Internal diseases in training	Physician, academic teacher	Clinical classes

Name of unit teaching course:	**Dept. and Clinic of Nephrology and Transplantation Medicine**
Address	Borowska 213, 50-556 Wrocław
Phone	71 733 25 00
E-mail	nefrologia@umed.wroc.pl

Person responsible for course:	Prof. Magdalena Krajewska, MD, PhD
Phone	71 733 25 00
E-mail	nefrologia@umed.wroc.pl

List of persons conducting specific classes:	*degree/scientific or professional title*	*Discipline*	*Performer profession*	*Form of classes*
Magdalena Krajewska	Professor, MD, PhD	Internal diseases, nephrology, transplantology	Physician, academic teacher	Lectures

Name of unit teaching course:	**Dept. and Clinic of Pulmonology and Lung Cancers**
Address	Grabiszyńska 105, 53-439 Wrocław
Phone	71 334 95 59
E-mail	pulmonologia.klinika@umed.wroc.pl

Person responsible for course:	Assoc. Prof. Monika Kosacka, MD PhD
Phone	71 334 95 59
E-mail	monika.kosacka@umed.wroc.pl

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List of persons conducting specific classes:	*degree/scientific or professional title*	*Discipline*	*Performer profession*	*Form of classes*
Anna Brzecka	MD, PhD, Professor WMU	Internal diseases, pulmonology	Physician, academic teacher	Lectures

Name of unit teaching course:	**Dept. and Clinic of Rheumatology and Internal Disease**
Address	Borowska 213, 50-556 Wrocław
Phone	71 734 33 00
E-mail	sekreum@reum.umed.wroc.pl

Person responsible for course:	Prof. Piotr Wiland, MD, PhD
Phone	71 734 33 00
E-mail	sekreum@reum.umed.wroc.pl

List of persons conducting specific classes:	*degree/scientific or professional title*	*Discipline*	*Performer profession*	*Form of classes*
Piotr Wiland	Professor, MD, PhD	Internal diseases, rheumatology	Physician, academic teacher	Lectures
Jerzy Świerkot	Professor, MD, PhD	Internal diseases, rheumatology	Physician, academic teacher	Lectures

Date of Syllabus development

28.05.2020.....

Syllabus developed by

Agata Mulak

Agata Mulak, MD, PhD

Signature of Head of teaching unit

.....

Signature of Faculty Dean

.....

Wroclaw Medical University
Faculty of Medicine
Vice-Dean for Clinical Studies
prof. Beata Sobieszczańska, MD, PhD