







<b>Dept. and Clinic of Rheumatology and Internal Medicine</b>				10										
<b>Dept. and Clinic of Gastroenterology and Hepatology</b>				10										
<b>Dept. and Clinic of Nephrology and Transplantation Medicine</b>				10										
<b>Dept. and Clinic of Angiology, Hypertension and Diabetology</b>				5										
<b>Dept. and Clinic of Pulmonology and Lung Cancers</b>				5										
				95										
<b>TOTAL per year:</b>														
				240										
<b>Educational objectives (max. 6 items)</b>														
C1. To acquire the knowledge of taking history and performing physical examination in adult patient.														
C2. To acquire the knowledge of the symptomatology of hormonal disorders in adult patients.														
C3. To develop the skills of interpretation of abnormalities found on examination.														
C4. To develop the ability to perform differential diagnosis in adult patients.														
C5. To know the rules of contemporary treatment regimens of internal diseases.														
<b>Education result matrix for module/course in relation to verification methods of the intended education result and the type of class</b>														
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>						
<b>W02</b>	<b>EW7</b>	Student describes and understands causes, symptoms, methods of diagnosis for the most common lung diseases of adults and their complications: chronic obstructive pulmonary disease (COPD), bronchial asthma, interstitial lung diseases, infections of respiratory system, pleural diseases, breathing disorders during sleep, respiratory insufficiency, lung cancer.			Credit test or oral answer			CC						
<b>W03</b>	<b>EW7</b>	Student explains therapeutic			Credit test or			CC						



		procedures diagnosis for the most common lung diseases	oral answer	
<b>W04</b>	<b>EW23</b>	Student describes epidemiological and environmental conditions for the lung cancer	Credit test or oral answer	CC
<b>W 05</b>	EW1	Student describes etiopathogenesis, including genetic and epidemiological determinants of vascular diseases	Oral presentation, practical examination, theoretical examination (oral)	CC
<b>W 06</b>	E W7	Student defines the symptoms, principles of diagnosis and therapeutic treatment of vascular diseases		CC
<b>W 07</b>	E W29	Student knows the principles of pain treatment, including chronic pain		CC
<b>W 08</b>	E W 38	Student knows the theoretical and practical basics of laboratory tests in vascular diseases		CC
<b>W 09</b>	E. W39	Student knows the possibilities and limitations of laboratory tests in acute vascular diseases		CC
<b>S 01</b>	<b>EU12</b>	Student conducts differential diagnosis of the most common pulmonary diseases	Direct observation of medical skills	CC
<b>U 02</b>	<b>EU14</b>	Student recognizes life threat states	Direct observation of medical skills	CC
<b>U 03</b>	<b>EU16</b>	Planned diagnostic and therapeutic procedures for the most common lung diseases	Direct observation of medical skills	CC
<b>U 04</b>	<b>EU18</b>	Student makes proposals of individualization of guidelines or other treatment methods according to contraindications or to the effectiveness to the standard therapy	Direct observation of medical skills	CC
<b>U 05</b>	<b>EU29</b>	Student performs the basic procedures: spirometry, pulsoxymetry, oxygen supplementation, mechanical ventilation	Direct observation of medical skills	CC
<b>U06</b>	<b>EU30</b>	Student assist in pulmonary procedures like thin needle biopsy, pleural drainage		CC
<b>U 01</b>	<b>EU1</b>	Student successfully takes a medical history, especially in terms of the vascular diseases	Oral presentation, practical examination, theoretical examination (oral)	CC
U 02	<b>EU14</b>	student recognizes the risk of life-threatening		CC
U 03	<b>EU16</b>	student plans diagnostic, therapeutic and prophylactic procedures in vascular diseases		CC
				CC



U 04	EU24	Student interprets the results of laboratory findings.		CC
U 05	EU29	Student performs basic medical procedures (measurement of blood pressure, pulse and temperature, performing simple test strips, measurement of blood glucose)		

\*\* 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:	240
2. Student's own work (self-study):	234
Total student's workload	474
<b>ECTS points for module/course</b>	<b>16,0</b>
Comments	n/a

**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)

**Department and Clinic of Endocrinology, Diabetology and Isotope Therapy**

**Practical classes - winter semester**

**1. Hyperthyroidisms** - differential diagnosis, diseases causing hyperthyroidism, algorithm of management. Orbitopathy, thyroid storm, thyrocardiac syndrome. Radioiodine treatment in thyroid diseases - indications and contraindications.

**Hypothyroidisms, thyroiditis:** differential diagnosis, rudiments of treatment. Ultrasonography of thyroid gland.

**Thyroid cancer:** differential diagnosis and treatment.

**Diffuse and nodular goiter:** diagnostic procedures, management, iodine prophylaxis.

**Fine needle aspiration biopsy** - indications, contraindications, advantages and disadvantages, Bethesda classification of thyroid cytology. Indications for surgical treatment in thyroid diseases.

**2. Glucose metabolism disorders. Diabetes mellitus:** diagnostic algorithm, insulin secretory pattern in healthy individuals and diabetics. Options for diabetic treatment: principles of insulin therapy, oral hypoglycemic agents. Algorithm of therapy with antidiabetic agents in type 2 diabetes mellitus. Goals of insulin treatment. Outcome measures to assess diabetes management. Diabetic complications: hypoglycaemia, diabetic ketoacidosis, hyperosmolar hyperglycemic state - treatment algorithms.

**Disorders of adrenal glands:** differential diagnosis. Treatment options in case of hypercortisolaemia and adrenal gland insufficiency.

**Carcinoma of adrenal gland** - diagnosis and treatment procedures.

**Dept and Clinic of Hematology, Blood Neoplasm and Bone Marrow Transplantation**

**Practical classes - winter semester**

Winter semester (20 hrs - 2 days) - Assistants and tutors of the clinic

DAY 1. Contemporary diagnostic and therapeutic approach in hematology. Principles and practice of chemo- and radiotherapy in hematology / Myeloproliferative syndromes: polycythemia vera, essential



thrombocythemia, osteomyelofibrosis, chronic myeloid leukemia, symptoms, diagnostics, treatment.  
Myelodysplastic syndrome

DAY 2. Limfoproliferative neoplasms / Non-Hodgkin lymphomas and Hodgkin lymphoma – symptoms, diagnostics, treatment. / Chronic lymphocytic leukemia. Tumor lysis syndrome – symptoms, diagnostics, treatment / Plasmocytic dyscrasias – classification, MGUS, presence of monoclonal protein in other diseases. Plasmapheresis – indications, procedure, complications.

#### **Department and Clinic of Endocrinology, Diabetology and Isotope Therapy**

##### **Practical classes - summer semester**

**1. Disorders of hypothalamic-pituitary unit:** acromegaly, hyperprolactinaemia, panhypopituitarism, diabetes insipidus: differential diagnosis, interpretation of hormonal tests. Methods of treatment. Presentation of clinical cases.

**Menstrual irregularities:** differential diagnosis (diagnostic algorithms). Methods of treatment.

**Endocrine diseases and pregnancy:** thyroid dysfunction in the pregnant patient – diagnosis and therapy. Gestational diabetes mellitus – diagnosis and treatment.

**Endocrinology of male reproduction** – diagnosis and therapy of hypogonadism. Age-related changes in the male reproductive axis – treatment options.

**2. Disorders of calcium and phosphate metabolism:** primary and secondary hyperparathyroidism – differential diagnosis, therapeutic options – indications for surgery, non-surgical approaches. Approach to hyper- and hypocalcemia, differential diagnosis.

**Hypertension associated with endocrine disorders:** diagnostic and therapeutic algorithms. Aldosterone to renin ratio as a tool in the diagnosis of hypertension. Differential diagnosis.

#### **Dept and Clinic of Hematology, Blood Neoplasm and Bone Marrow Transplantation**

##### **Practical classes – summer semester**

(10 hrs – 2 days) - Assistants and tutors of the clinic

DAY 1. Hematopoietic stem cell transplantation in the blood disorders – indications, purposes, course, types. Early and late complications after bone marrow transplantation / Blood transfusions in hematology, post-transfusion complications.

DAY 2. Platelet and vascular bleeding disorders. Coagulation disorders. Thrombophilia

#### **Department of Heart Diseases**

##### **Practical classes**

##### **WINTER TERM**

1. Physical examination of cardiovascular system, laboratory parameters used in cardiovascular disease, imaging techniques, drugs used in cardiology. ECG – basic rules.
2. Mitral regurgitation. STEMI. Coronary angiography and PCI. Advanced life support. Mitral stenosis. Bradyarrhythmias and conductance disturbances. NSTEMI.
3. Aortic regurgitation. SVT. AF/AFI. Prophylaxis of arterial and venous thrombotic events. Aortic stenosis. VT. Sudden cardiac death. Stable angina pectoris.
4. Other acquired valve diseases. Electrophysiology study, Holter ECG. PM + CRT + ICD. Prevention of cardiovascular diseases.

##### **SUMMER TERM**

1. Chronic heart failure. Cardiopulmonary exercise test. Heart transplantation.
2. Acute heart failure (including pulmonary oedema, cardiogenic shock, right ventricular failure, hyperkinetic heart failure)
3. Infective endocarditis. Pericarditis. Cardiac tamponade. Cardiac tumours.
4. Pulmonary hypertension. Congenital heart diseases.



**Department of Internal Medicine, Occupational Diseases, Hypertension and Clinical Oncology**

**WINTER SEMESTER**

1.
  - Patient with dyspnoea, patient with chest pain - algorithms and differential diagnosis
  - Decompensated heart failure, diagnostics, risk factors for decompensation, hemodynamic classification, principles of therapy;
2.
  - Patient with fainting – diagnostic imaging, differentiation (Vasovagal, VASIS classification; neurogenic; arrhythmias, tachy-brady syndrome)
3.
  - Stroke – guidelines for diagnosis and management
  - Patient with loss of consciousness, patient with symptoms of shock.
4.
  - Deep vein thrombosis - diagnosis of conditions predisposing to thrombosis, therapeutic procedures
  - Pulmonary embolism (PE) - the principle of diagnosis, qualification for interventional and pharmacological treatment.

**SUMMER SEMESTER**

5.
  - COPD exacerbation, exacerbation of asthma, pneumonia. Acute respiratory failure, sepsis – guidelines for diagnosis and management
  - Respiratory and metabolic acidosis. Respiratory and metabolic alkalosis. Compensatory mechanisms. The principles of diagnosis, interpretation and therapy.
6.
  - Patient with fever of unknown origin (FUO)
  - Patient with cachexia - principles of prophylaxis and therapy
7.
  - Emergencies in oncology
  - Emergencies in metabolic disorders - principles of diagnostic and therapeutic procedures.
  - Dehydration and overhydration. Hyponatremia, hyperemia, hyperkalemia, hypokalemia, hypocalcemia hypercalcemia. Hypophosphatemia

**Dept. and Clinic of Cardiology**

**Winter semester - classes**

Clinical class 1	Valvular heart diseases - diagnostics, treatment.	All lectors
Clinical class 2	Acute heart failure – diagnosis, treatment.	All lectors
Clinical class 3	Chronic heart failure – diagnosis, treatment.	All lectors

**Summer semester - classes**

Clinical class 1	Diseases of myocardium. Infective endocarditis.	All lectors
Clinical class 2	Pericarditis. Pregnancy and cardiac disorders.	All lectors

**Dept. and Clinic of Gastroenterology and Hepatology (winter and summer semester)**

1. Differential diagnosis of esophageal diseases. Achalasia. Esophageal motility disorders. Functional esophageal disorders. Diverticulum of the esophagus. Eosinophilic esophagitis. Mallory-Weiss



syndrome.

2. Peptic ulcers of stomach and duodenum – complications and their therapy. Eradicative therapy of the *Helicobacter pylori* infection. Functional gastroduodenal disorders.
3. Extraintestinal manifestations and complications of coeliac disease. Differential diagnosis of inflammatory bowel disease. Intestinal ischaemia. Small intestine bacterial overgrowth.
4. Functional bowel disorders. Functional anorectal disorders. Gastrointestinal bleeding. Hereditary and familial colorectal cancer. Surveillance after colonic polypectomy.
5. Metabolic liver disorders. Treatment of the liver cirrhosis complications. Indications for liver transplantation. Biliary tract dyskinesia. Neuroendocrine gastrointestinal tumors. Differential diagnosis of pancreatic tumors.

### **Department and Clinic of Nephrology and Transplantation Medicine**

#### **Seminars/Auditory classes/ Introduction and Summary of the classes:**

1. Practical approach to the patient with suspected kidney disease
2. Sudden worsening of the renal function
3. Chronic renal failure

#### **Clinical classes:**

1. Practical approach to the patient with suspected kidney disease; major complains and symptoms: arterial hypertension, loin pain, swellings, oliguria and polyuria. Evaluation of kidney function lab results and abnormal urinary sediment, additional examinations e.g. ultrasound, renal scintigraphy, renal angiography, computerized tomography. Approach to the patient with hematuria and proteinuria.
2. Acute glomerulonephritis and primary chronic glomerulonephritis; nephrotic syndrome, indications for biopsy; supportive treatment, principles of steroid therapy.
3. Patient with urinary tract infections and renal stones. Principles of prophylaxis.
4. Sudden worsening of the renal function. Acute kidney injury (AKI). Differential diagnosis of AKI patient: chronic vs acute disorders, intoxication, trauma, obstructive uropathy. Acute renal failure developed inside the hospital: nephrotoxic drugs, contrast-media nephropathy, fluid and electrolyte depletion, surgery complications. Reno-vascular hypertension and hypertension in kidney diseases: clinical features, diagnostic algorithm in the secondary (suspected renal) hypertension.
5. Chronic renal failure. Remediable contributors in renal failure. The importance of cardiovascular disorders in ESRD.

### **Department and Clinic of Rheumatology and Internal Medicine:**

#### **Seminars**

1. Systemic connective tissue diseases; systemic lupus erythematosus, systemic sclerosis, polymyositis, mixed connective tissue disease. Pathogenesis, clinical picture, diagnostics, treatment.

#### **Practical classes**

1. Systemic lupus erythematosus, systemic sclerosis, polymyositis, mixed connective tissue disease
2. Systemic vasculitis-division of pathogenesis, clinical picture, diagnosis and treatment.
3. The role of imaging tests in the diagnosis o

### **Department of Pulmonology and Lung Cancers:**

#### **Practical classes (winter and summer semester)**

1. Interstitial lung diseases (ILD)-What causes ILD?. What are the symptoms of ILD. Complications of ILD





(pulmonary hypertension, cor pulmonale, respiratory insufficiency), How is ILD diagnosed? Treatment of ILD. Sarcoidosis.

2. Pleural diseases. Approach to patients with pleural effusion. Pleurisy, pleural transudation, hemothorax, chylothorax. Performing of pleural thoracentesis and evaluation of ultrasound. Complications of thoracentesis: pneumothorax, infection, hemothorax, vasovagal reaction with bradycardia and hypotension. Pleural fluid analysis. Etiology and differentiation between transudative and exudative pleural effusions. Fibrosis of the pleura. Calcification of the pleura. Etiology, symptoms and signs.

3. Procedures in acute states in pulmonology. Etiology and diagnosis of hemoptysis. Causes of dyspnea and chest pain. Pulmonary embolization. Acute respiratory failure. Blood gases analysis.

4. The differential diagnosis of the major lung diseases. Planning diagnostic procedure. Learning individual choice therapy in pulmonary diseases, including infectious diseases, lung cancer and sleep apnea syndrome - in accordance with applicable guidelines, but taking into account the specific situations as ineffective or contraindicated for the treatment of a standard. Non-invasive mechanical ventilation and oxygen therapy principles.

#### **Department of Angiology, Hypertension and Diabetology**

1. Extracranial carotid and vertebral artery disease: etiology, clinical picture, diagnosis and treatment.

Vascular compression disorders:

- subclavian steal syndrome
- popliteal artery entrapment syndrome
- nutcracker syndrome

Thoracic outlet syndrome: pathogenesis, differential diagnosis, treatment.

Vasculitis:

- Takayasu's arteritis
- Thromboangiitis obliterans (Buerger's disease)
- Giant-cell arteritis

2. Acute vascular diseases:

- aortic dissection
- aortic aneurysm

Visceral artery disease: acute and chronic mesenteric ischemia.

Secondary hypertension in the course of renal artery stenosis.

Renal artery angioplasty: indications, contraindications

Congenital vascular malformations.

Superior vena cava syndrome.

Thrombophilia: definition, diagnosis


#### **Basic (mandatory literature):**

- Harrison's Principles of Internal Medicine, 20<sup>th</sup> Edition J. Larry Jameson, Anthony S. Fauci, Dennis L. Kasper, Stephen L. Hauser, Dan L. Longo, Joseph Loscalzo; : McGraw-Hill Education – Europe: 2018 ISBN13 (EAN): 9781259644030

9781259644030

-The Guidelines of the European Society of Cardiology <http://www.escardio.org/knowledge/guidelines/>

#### **Additional literature and other materials :**

- Braunwald's Heart Disease. A Textbook of Cardiovascular Medicine. 9<sup>th</sup> Edition  Elsevier - Health Sciences Division 2018; ISBN13 (EAN): 9780323462990.

-Williams Manual of Hematology, 9th Edition. Marshall A. Lichtman. McGraw-Hill Medical, 2016. ISBN13 (EAN): 9781259642470

-Williams Textbook of Endocrinology Shlomo Melmed, Kenneth S. Polonsky, P. Reed Larsen, Henry M. Kronenberg  Elsevier - Health Sciences Division 2016 ISBN13 (EAN): 9780323297387

**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)



Basic anatomy, physiology and pathophysiology  
Preparation for classes and knowledge from previous years of study.

**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).

**A 100% of attendance and the test conducted at the end of each semester for all the sixth-year students.**

Students who miss one class, must contact directly the particular tutors to obtain the attendance. There is no other option to make up the classes, since the course is conducted once a year.

**Each absence must be made up, including rector's days or dean's hours.**

**Only the students who successfully passed both credit tests (in winter and summer semester) are allowed to admit the examination (both test and oral exam).**

The examination consists of a written test (100 questions) and extended practical exam, which is based on the interpretation of additional test results such as:

examination of the patient in the clinic (summarized as a proposal for the diagnostic and therapeutic strategy),

ECG,

laboratory and radiological images.

Obtaining credit from the written test (at least 60% of correct answers) allows to admit to the practical part of examination. Negative results in the test exam result in the second term exam (retake). To draw examiner is valid.

Grade:	Criteria for course (midterm exam – credit test in winter and summer semester)
Very Good (5.0)	<p>test result <math>\geq 92\%</math> + 100% attendance the arithmetical average from the classes conducted at particular departments: 4.76-5.00</p> <p>The knowledge and skills undergoing verification are related to the physical examination, interpretation of the lab tests/imaging diagnostics/ecg, differential diagnostics, final diagnosis and proposal for the management – must be evaluated as 5.0</p>
Good Plus (4.5)	<p>test result <math>\geq 84\%</math> + 100% attendance the arithmetical average from the classes conducted at particular departments: 4.26-4.75</p> <p>The knowledge and skills undergoing verification are related to the physical examination, interpretation of the lab tests/imaging diagnostics/ecg, differential diagnostics, final diagnosis and proposal for the management – must be evaluated as 4.5</p>
Good (4.0)	<p>test result <math>\geq 76\%</math> + 100% attendance the arithmetical average from the classes conducted at particular departments: 3.76-4.25</p> <p>The knowledge and skills undergoing verification are related to the physical examination, interpretation of the lab tests/imaging diagnostics/ecg, differential diagnostics, final diagnosis and proposal for the management – must be evaluated as 4.0</p>
Satisfactory Plus (3.5)	<p>test result <math>\geq 68\%</math> + 100% attendance the arithmetical average from the classes conducted at particular departments: 3.50-3.75</p>



	The knowledge and skills undergoing verification are related to the physical examination, interpretation of the lab tests/imaging diagnostics/ecg, differential diagnostics, final diagnosis and proposal for the management – must be evaluated as 3.5
Satisfactory (3.0)	test result $\geq 60\%$ + 100% attendance the arithmetical average from the classes conducted at particular departments: 3.00-3.49 The knowledge and skills undergoing verification are related to the physical examination, interpretation of the lab tests/imaging diagnostics/ecg, differential diagnostics, final diagnosis and proposal for the management– must be evaluated as 3.0
<b>Grade:</b>	<b>Criteria for the final exam</b>
Very Good (5.0)	$\geq 92\%$ of correct answers for 100 questions in the test exam, very good grade in the extended practical exam
Good Plus (4.5)	$\geq 84\%$ of correct answers for 100 questions in the test exam, good plus grade in the extended practical exam
Good (4.0)	$\geq 76\%$ of correct answers for 100 questions in the test exam, good grade in the extended practical exam
Satisfactory Plus (3.5)	$\geq 68\%$ of correct answers for 100 questions in the test exam, satisfactory plus grade in the extended practical exam
Satisfactory (3.0)	$\geq 60\%$ of correct answers for 100 questions in the test exam, satisfactory grade in the extended practical exam

<b>Name of unit teaching course:</b>	<b>Department and Clinic of Endocrinology, Diabetology and Isotope Therapy</b>
Address	Pasteura 4 Street, 50-367 Wrocław, Poland
Phone	+48(71)7842546
E-mail	<a href="mailto:marek.bolanowski@umed.wroc.pl">marek.bolanowski@umed.wroc.pl</a>
<b>Person responsible for course:</b>	<b>Prof. Marek Bolanowski, MD, PhD</b>
Phone	+48 71 7842554
E-mail	<a href="mailto:marek.bolanowski@umed.wroc.pl">marek.bolanowski@umed.wroc.pl</a>

<b>Name of unit teaching course:</b>	<b>Department and Clinic of Haematology, Blood Neoplasms, and Bone Marrow Transplantation</b>
Address	Wrocław, ul. Wybrzeże L. Pasteura 4
Phone	+48 71 7842576
E-mail	<a href="mailto:tomasz.wrobel@umed.wroc.pl">tomasz.wrobel@umed.wroc.pl</a>
<b>Person responsible for course:</b>	<b>Prof. Tomasz Wrobel, MD, PhD</b>
Address	Wrocław, ul. Wybrzeże L. Pasteura 4
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<b>Name of unit teaching course:</b>	<b>Department and Clinic of Heart Diseases</b>
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Address	Borowska 213
Phone	261-660-275
E-mail	aleksandra.erbert@umed.wroc.pl
<b>Person responsible for course:</b>	<b>Prof. Piotr Ponikowski, MD, PhD</b>
Phone	261-660-237
E-mail	piotr.ponikowski@umed.wroc.pl

<b>Name of unit teaching course:</b>	<b>Department and Clinic of Internal, Occupational Diseases, Hypertension and Clinical Oncology</b>
Address	Borowska 213; 50-556 Wrocław
Phone	+48 71 736 4051
E-mail	anna.jodkowska@umed.wroc.pl
<b>Person responsible for course:</b>	<b>Anna Jodkowska, MD, PhD</b>
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<b>Name of unit teaching course:</b>	<b>Department and Clinic of Cardiology</b>
Address	Borowska 213; 50-556 Wrocław
Phone	+48 71 736 42 00
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<b>Person responsible for course:</b>	<b>Konrad Kaaz, MD, PhD</b>
Phone	+48 71 736 4190
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<b>Name of unit teaching course:</b>	<b>Department and Clinic of Nephrology and Transplantation Medicine</b>
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<b>Person responsible for course:</b>	<b>Prof. Magdalena Krajewska, MD, PhD</b>
Phone	+48 71 733 25 00
E-mail	<a href="mailto:klinef@am.centrum.pl">klinef@am.centrum.pl</a>

<b>Name of unit teaching course:</b>	<b>Department and Clinic of Pulmonology and Lung Cancers</b>
Address	53-439 Wrocław, Grabiszyńska 105
Phone	+48 71 33 49 559, +48 71 33 49 670;
E-mail	pulmonologia.klinika@umed.wroc.pl
<b>Person responsible for course:</b>	<b>Anna Brzecka MD, PhD, Assoc. Prof.</b>



<b>Phone</b>	+48 71 33 49 559, +48 71 33 49 670;
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<b>Name of unit teaching course:</b>	<b>Department and Clinic of Angiology, Hypertension and Diabetology</b>
<b>Address</b>	Borowska 213 Wrocław
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<b>Name of unit teaching course:</b>	<b>Department of Rheumatology and Internal Medicine</b>
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<b>Person responsible for course:</b>	<b>Prof. Piotr Wiland, MD, PhD</b>
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<b>E-mail</b>	sekreum@reum.umed.wroc.pl

**Department and Clinic of Endocrinology, Diabetology and Isotope Therapy:**

<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 Bolanowski	M.D., PhD, Professor	Internal medicine, endocrinology	physician	Clinical course
Jacek Daroszewski	M.D., PhD, Professor	Internal medicine, endocrinology, diabetology	physician	Clinical course
Justyna Kuliczowska-Plaksej	M.D. PhD	Internal medicine, endocrinology	physician	Clinical course
Katarzyna Zawadzka	M.D., PhD	Internal medicine, endocrinology	physician	Clinical course
Aleksandra Jawiarczyk-Przybyłowska	M.D., PhD	Internal medicine, endocrinology	physician	Clinical course
Jowita Halupczok-Zyla	M.D., PhD candidate	Internal medicine, endocrinology	physician	Clinical course
Aleksandra Zdrojowy-Welna	M.D., PhD	Internal medicine, endocrinology	physician	Clinical course
Anna Brona	M.D., PhD	Internal medicine, endocrinology	physician	Clinical course
Marcin Kaluzny	M.D., PhD	Internal medicine, endocrinology, diabetology	physician,	Clinical course
Eliza Kubicka	M.D., PhD	Internal medicine, endocrinology	physician,	Clinical course
Lukasz Gojny	M.D., PhD candidate	Internal medicine, endocrinology	physician	Clinical course
Barbara Stachowska	M.D., PhD	Internal medicine,	physician	Clinical



		endocrinology		course
Beata Polowczyk	M.D., PhD candidate	Internal medicine, endocrinology	physician	Clinical course
Michał Miner	M.D., PhD candidate	endocrinology	physician	Clinical course
Aleksandra Drabik	M.D., PhD candidate	Internal medicine, endocrinology	physician	Clinical course
Małgorzata Rolla	M.D., PhD candidate	Internal medicine, endocrinology	physician	Clinical course

**Dept. and Clinic of Hematology, Blood Neoplasm and Bone Marrow Transplantation:**

<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>
T. Wróbel	Prof.	Hematologist	physician	Clinical course
M. Podolak-Dawidziak	Prof.	Hematologist	physician	Clinical course
L. Usnarska-Zubkiewicz	Prof.	Hematologist	physician	Clinical course
D. Wołowicz	Prof.	Hematologist	physician	Clinical course
A. Czyż	Assoc. Prof.	Hematologist	physician	Clinical course
D. Urbaniak-Kujda,	Assoc. Prof.	Hematologist	physician	Clinical course
M. Sobas	MD, PhD	Hematologist	physician	Clinical course
S. Potoczek	MD, PhD	Hematologist	physician	Clinical course
J. Rybka	MD, PhD	Hematologist	physician	Clinical course
M. Biernat	MD, PhD	Hematologist	physician	Clinical course
E. Kalicińska	MD, PhD	Microbiologist, Internal Med.	physician	Clinical course
A. Szeremet	MD	Internal Medicine	physician	Clinical course
J. Dębski	MD	PhD candidate	physician	Clinical course
M. Sawicki	MD	PhD candidate	physician	Clinical course
A. Walasek	MD	PhD candidate	physician	Clinical course

**Dept. and Clinic of Heart Diseases:**

<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>
Piotr Ponikowski	Professor	internal medicine, cardiology	physician	CC
Ewa Jankowska	Professor	internal medicine, cardiology	physician	CC
Krzysztof Reczuch	Professor	internal medicine, cardiology	physician	CC
Piotr Kübler	MD, PhD, Assoc. Prof.	internal medicine, cardiology	physician	CC
Krzysztof Josiak	MD, PhD	internal medicine, cardiology	physician	CC
Robert Zymliński	MD, PhD	internal medicine, cardiology	physician	CC
Jan Biegus	MD, PhD	internal medicine, cardiology	physician	CC
Piotr Niewiński	MD, PhD	internal medicine, cardiology	physician	CC
Mateusz Sokolski	MD, PhD	internal medicine, cardiology	physician	CC
Krzysztof Nowak	MD, PhD	internal medicine, cardiology	physician	CC
Wojciech Zimoch	PhD	cardiology	physician	CC
Michał Kosowski	MD	cardiology	physician	CC



Michał Tkaczyszyn	MD	cardiology	physician	CC
Stanisław Tubek	MD	cardiology	physician	CC
Marcin Drozd	MD	internal medicine, cardiology	physician	CC

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

<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>
Adrian Doroszko	MD, PhD, Assoc. Prof.	Internal medicine, cardiology	physician	CC
Anna Jodkowska	MD, PhD	Internal medicine, endocrinology, hypertensiology	physician	CC
Maciej Podgórski	MD	Internal medicine, cardiology	physician	CC
Helena Martynowicz	MD, PhD	Internal medicine, hypertensiology	physician	CC, L
Maciej Jakubowski	MD, PhD	Internal medicine, in training	physician	CC
Aleksandra Butrym	MD, PhD, Assoc. Prof.	Internal medicine, hematology	physician	CC
Jarosław Dybko	MD, PhD	Internal medicine, hematology	physician	CC
Jakub Gawryś	MD, PhD candidate	Internal medicine, in training	physician	CC
Jakub Mochol	MD, PhD candidate	Internal medicine, in training	physician	CC
Maciej Bładowski	MD, PhD candidate	Internal medicine, in training	physician	CC
Damian Gajecki	MD, PhD candidate	Internal medicine, in training	physician	CC
Anna Skoczyńska	MD, PhD, Professor	Internal medicine, hypertensiology	physician	CC, L

**Department and Clinic of Cardiology**

<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>
Andrzej Mysiak	MD, PhD, Professor	Internal diseases, cardiology	physician	CC
Wojciech Kosmala	MD, PhD, Professor	Internal diseases, cardiology	physician	CC
Marta Negrusz-Kawecka	MD, PhD, Assoc. Prof.	Internal diseases, cardiology	physician	CC
Monika Przewłocka-Kosmala	MD, PhD, Assoc. Prof.	Internal diseases, cardiology	physician	CC
Wiktor Kuliczkowski	MD, PhD, Assoc. Prof.	Internal diseases, cardiology	physician	CC
Marcin Protasiewicz	MD, PhD, Assoc. Prof.	Internal diseases, cardiology	physician	CC
Tomasz Witkowski	MD, PhD, Assoc. Prof.	Internal diseases, cardiology	physician	CC
Dariusz Biały	MD, PhD, Assoc. Prof.	Internal diseases, cardiology	physician	CC
Konrad Kaaz	MD, PhD	Cardiology	physician	CC



Małgorzata Kobusiak-Prokopowicz	MD, PhD	Internal diseases, cardiology	physician	CC
Magdalena Cielecka-Prynda	MD, PhD candidate	Internal diseases, cardiology in training	physician	CC
Maciej Kabaj	MD, PhD candidate	Internal diseases, in training	physician	CC
Wojciech Kosowski	MD, PhD candidate	Internal diseases, in training	physician	CC

**Department and Clinic of Pulmonology and Lung Cancers:**

<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>
Anna Brzecka	MD, PhD, Assoc. Prof.	Internal Medicine, Pulmonology	Physician	CC
Monika Kosacka	MD, PhD	Internal Medicine, Pulmonology	Physician	CC
Aneta Kowal,	MD, PhD	Internal Medicine, Pulmonology	Physician	CC
Paweł Piesiak,	MD, PhD,	Internal Medicine, Pulmonology	Physician	CC
Irena Porębska,	MD, PhD,	Internal Medicine, Pulmonology	Physician	CC
Cyryl Daroszewski	MD	Trainee in Pulmonology	Physician	CC

**Dept. and Clinic of Rheumatology and Internal Medicine:**

**Lectures:**

**Prof. Piotr Wiland - specialist in internal medicine and rheumatology**

**Prof. Jerzy Świerkot - specialist in internal medicine and rheumatology**

**Clinical Classes / Seminars: Prof. Jerzy Świerkot - specialist in internal medicine and rheumatology**

**Renata Sokolik MD, PhD, - specialist in internal medicine and rheumatology**

**Magdalena Szmyrka MD, PhD, - specialist in internal medicine and rheumatology**

**Marta Madej MD, PhD, - specialist in internal medicine and rheumatology**

**Ewa Morgiel MD, PhD, - specialist in internal medicine and rheumatology**

**Agata Sebastian MD, PhD, - specialist in internal medicine and rheumatology**

**MD Marta Skoczyńska - PhD Candidate**

**MD Paweł Stepniewski - PhD Candidate**

**MD Bartłomiej Bugaj - PhD Candidate**

**Dept. and Clinic of Nephrology:**

<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>
Dorota Kamińska	MD, PhD	nephrology	Physician	CA, CC
Mariusz Kusztal,	MD, PhD	nephrology	Physician	CA, CC
Mirosław Banasik,	MD, PhD	nephrology	Physician	CA, CC
Krzysztof Letachowicz,	MD, PhD	nephrology	Physician	CA, CC





Tomasz Gołębiowski,	MD, PhD	nephrology	Physician	CA, CC
Sławomir Zmonarski,	MD, PhD	nephrology	Physician	CA, CC
Maciej Szymczak,	MD, PhD	nephrology	Physician	CA, CC
Katarzyna Jakuszko,	MD, PhD	nephrology	Physician	CA, CC
Hanna Augustyniak - Bartosik	MD, PhD	nephrology	Physician	CA, CC
Dagna Rukasz,	MD	internal medicine	Physician	CA, CC
Maciej Kanafa,	MD	internal medicine	Physician	CA, CC

#### Department and Clinic of Gastreterology and Hepatology

<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>
Agata Mulak	MD, PhD, Assoc. Prof.	Internal Medicine, Gastroenterology	Physician	CA, CC
Dorota Waśko-Czopnik	MD, PhD, Assoc. Prof.	Internal Medicine, Gastroenterology	Physician	CA, CC
Radosław Kempniński	MD, PhD	Internal Medicine, Gastroenterology	Physician	CA, CC
Katarzyna Neubauer	MD, PhD	Internal Medicine, Gastroenterology	Physician	CA, CC
Robert Dudkowiak	MD, PhD	Internal Medicine, Gastroenterology	Physician	CA, CC
Adam Smereka	MD, PhD	Internal Medicine, Gastroenterology	Physician	CA, CC
Monika Kukulska	MD, PhD	Internal Medicine	Physician	CA, CC
Anna Zubkiewicz- Zarębska	MD, PhD	Internal Medicine	Physician	CA, CC
Izabela Smoła	MD	Internal Medicine	Physician	CA, CC

#### Department and Clinic of Angiology, Diabetology and Hypertension

<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>
Izabela Gosk-Bierska	MD, PhD, Assoc. Prof.	Internal Medicine, Angiology	Physician	CA, CC
Rafał Małecki	MD, PhD, Assoc. Prof.	Internal Medicine, Angiology	Physician	CA, CC
Maciej Rabczyński	MD, PhD	Internal Medicine, Angiology	Physician	CA, CC
Marta Wasilewska	MD	Internal Medicine,	Physician	CA, CC
Marcin Pawlak	MD, PhD candidate	Internal Medicine,	Physician	CA, CC



**Date of Syllabus development**

29.07.2019

**Syllabus developed by**

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**Signature of Head of teaching unit**

Uniwersytet Medyczny we Wrocławiu  
KATEDRA I KLINIKA ENDOKRYNOLOGII,  
DIABETOLOGII I LECZENIA IZOTOPAMI  
kierownik

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**Signature of Faculty Dean**

Wrocław Medical University  
FACULTY OF MEDICINE  
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