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

# Syllabus

## Description of the course

| | | | |
|---|---|---|---|
| Module/Course | Internal Medicine | Group of detailed education results | |
| | | Group code E | Group name |
| Faculty | Dentistry | | |
| Major | Dentistry | | |
| Specialties | | | |
| Level of studies | Uniform magister studies x*<br>1st degree studies<br>2nd degree studies<br>3rd degree studies<br>postgraduate studies | | |
| Form of studies | x full-time x part-time | | |
| Year of studies | 3,4 | Semester | x Winter<br>x Summer |
| Type of course | x obligatory<br>limited choice<br>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: Dept. of Nephrology and Transplantation Medicine | 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** | | | | | | | | | | | | | | |
| semester 5 | 15 | 5 | | | 30 | | | | | | | | | |
| semester 7 | 10 | 5 | | | 20 | | | | | | | | | |
| **Summer Semester** | | | | | | | | | | | | | | |
| semester 6 | 15 | 5 | | | 30 | | | | | | | | | |
| | | | | | | | | | | | | | | |

TOTAL per year: year 3- 100 hours, year 4- 35 hours

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

Educational objectives (max. 6 items)

C1 The purpose of education is to familiarize students with the pathogenesis, symptomatology, and treatment of internal medicine

C2 Knowing preventive activities against formation of kidney medicine

C3 Interpretation of medical research, making a diagnosis, differential diagnosis. Keeping medical records.

C4 Students should possess the ability to efficiently collect medical history, physical examination, proper technique with the correct interpretation of the clinical examination ascertained deviations from the norm

C5 Students also owe to possess knowledge of basic laboratory tests and diagnostic procedures, including internal medicine with knowledge of the results of variations in the underlying disease entities

C6 Students should possess the ability to carry out differential diagnosis, perform simple diagnostic tests with the diagnosis, therapy planning of the basic units of internal medicine

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 ***enter the abbreviation* |
|---|---|---|---|---|
| W 01 | **E.W1** | The student understands the relationship between morphological abnormalities, altered function of urinary system and the clinical symptoms, the diagnosis and treatment options | Oral response | L, SE, CC |
| W02 | **E.W1** | He knows the basic methods of medical research and the role of laboratory tests in the diagnosis, monitoring, prognosis and prevention of urinary organ dysfunction. | Oral response | L, SE, CC |
| W03 | **E.W1** | He knows the pathogenesis and symptomatology of kidney diseases | Oral response | L, SE, CC |

| | | | | |
|---|---|---|---|---|
| **U1**<br><br>**U2**<br><br>**U3**<br><br>**U4**<br><br>**U5** | | Student performs differential diagnosis of the most common diseases of adults<br><br>Assesses and describes the state of the patient's somatic<br><br>Planned diagnostic and therapeutic procedures for the most common diseases of adults<br><br>Interprets the results of laboratory tests<br><br>Normal and pathological identifies strultury and organs in additional imaging studies (X-ray, ultrasound, CT) | **E.U1**<br><br>**E.U2**<br><br>**E.U3**<br><br>**E.U4**<br><br>**E.U5** | |
| **K1**<br><br>**K2** | | Student takes part in diagnosis and treatment of a patient<br><br>Students participates in the decisions concerning the diagnostic and therapeutic activity | **E.K1**<br><br>**E.K2** | |

** 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
Social competences: 5

| Student's amount of work (balance of ECTS points) | |
|---|---|
| Student's workload<br>(class participation, activity, preparation, etc.) | Student Workload (h) |
| 1. Contact hours: | 135 |
| 2. Student's own work (self-study): | 45 |
| Total student's workload | 180 |
| ECTS points for module/course | 7,5 |
| 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

**3rd year 30 hours**

SEM 1

1. Internal medicine, is it important for a dentist? Introduction.
2. Taking a history – rules.
3. Medical internal examination.
4. Signs & symptoms, diagnostics – heart diseases.
5. Heart diseases – threat to life, proceedings.
6. Signs & symptoms, diagnostics – pulmonary system.
7. Signs & symptoms, diagnostics – digestive system

SEM.2.

8. Signs & symptoms, diagnostics- liver damage and hepatitis
9. Signs & symptoms, diagnostics- rheumatological disorders
10. Signs & symptoms, diagnostics- nephrological disorders
11. Signs & symptoms, diagnostics- endocrinological disorders
12. Signs & symptoms, diagnostics- hematological disorders
13. Signs & symptoms, diagnostics- infectious diseases
14. Signs & symptoms, diagnostics- atopic diseases, allergies, resuscitation

**4th year 15 hours**

1.Patient with hypertension and coronary artery disease at the dentist's.

2.Patient with diabetes at the dentist's

3.Patient with hematological disorders at the dentist's

4.Patient with chronic kidney disease at the dentist's

5.Patient with liver damage and hepatitis at the dentist's

6.Patient with atopic disease at the dentist's

7.Patient with collagenous disease at the dentist's

Seminars

Seminars (5.6 semester)

1 History and physical examination

2 Cardiovascular Disease

3 Respiratory Diseases

4 Diseases of the digestive tract

5 Diseases of the urinary system

6 Diseases of the hematopoietic system

7 Diseases of the endocrine origin

8 Diabetes and its complications

9 Allergic diseases

10 Rheumatological diseases

Practical classes

**Semester 5**

1. Organization of the Internal Ward. Interviewing and comprehensive health history taking. Principal symptoms of diseases: pain, fainting, dizziness, dyspnoea, edema, heart palpitation.
2. Medical history taking. Social interview, family history, epidemic diseases, stimulants, medications. Simplifying evaluation of the patient general status (consciousness, complaints, vital signs).
3. Assessment of the patient's general health status (vital signs, cognitive and psychical status, nutritional status). Skin assessment. Examination of head, neck and lymph nodes.
4. Examination of the chest. Types of chest. Topography of chest organs. Chest percussion and auscultation.
5. Examination of the respiratory system. General palpation of the chest wall. Percussion of lungs. Breath sounds.
6. Chest examination continuation: the heart. Inspection and palpation of the heart region. Cardiac apex impulse.
7. The cardiac examination. Heart sounds and murmurs, heart rate.
8. Examination the vascular system. Blood pressure measurement. Arterial pulse characteristics. Physical examination of limb vessels. Symptoms of deep vein thrombosis and critical limb

ischemia. Oedemas.

9. Abdomen examination – quadrants and regions of the abdomen, common findings on inspection, auscultation and palpation of the abdomen, causes of abdominal pain and distension.
10. Abdomen examination – locations of abdominal organs, examination of liver, spleen, pancreas. Gut sounds. Signs of peritoneal irritation.
11. Examination of genito-urinary system.
12. The physical examination of the spine and lower extremities, special maneuvers for examination of the spine, knee and ankle.
13. Neurologic examination – cranial nerves. Examination of touch, sharp, position and vibration sensation. Deep tendon reflexes examination. Tests of coordination. Abnormal gaits.
14. Summary and repetition.
15. Practical exam.

**Semester 6**

1. Respiratory disorders, part 1. Upper respiratory tract infections. Asthma vs COPD. Pulmonary function tests.
2. Respiratory disorders, part 2. Lower respiratory tract infections. Pneumonia. Pneumothorax . Hydrothorax. Lung abscess. Tuberculosis. Lung cancer. Radiological and diagnostic procedures.
3. Circulatory disorders, part. 1. Valvular heart disease. Congenital and acquired heart defects. Endocarditis, myocarditis and pericaditis. Systemic hypertension, primary and secondary arterial hypertension.
4. Circulatory disorders, part. 2. ECG. Atherosclerosis. Ischemic heart disease. Myocardial infarction.
5. Circulatory disorders, part. 3. Acute and chronic circulatory insufficiency. Cardiac arrhythmia. Thrombophlebitis and thromboemolism.
6. Gastrointestinal tract disorders, part 1. Patient with abdominal pain, dysphagia, vomiting, constipation, diarrhea. Acute abdomen. Gastrointestinal bleeding. GERD. Inflammatory bowel diseases. Irritated bowel syndrome.
7. Gastrointestinal tract disorders, part 2. Acute and chronic hepatitis. Liver cirrhosis. A patient with jaundice. Pancreatitis. Gallstone disease. GI tract cancers.
8. Urinary tract disorders. Symptoms, urine analysis, ultrasound examination. \approach to patent with hematuria and proteinuria. Glomerular diseases. Renal stones. Acute kidney failure. Chronic kidney disease. Renal replacement therapy.
9. Endocrine disorders, part 1. Diabetes mellitus, Hypoglycemia, comas. OGTT and other

functional tests. Complications of diabetes mellitus.

10. Endocrine disorders, part 2. Disorders of pituitary, thyroid and suprarenal glands.
11. Endocrine disorders, part 3. Osteoporosis – diagnosis, prevention and treatment. . Parathyroid glands disorders: the role of parathormone, calcitonin and vitamin D in the homeostasis of calcium.
12. Arthrosis and arthritis. Systemic collagenous diseases: lupus, sclerodermia, rheumatoid arthritis.
13. Hematology: anemia, bleeding diathesis, leukemias, lymphadenopathy.
14. Allergy, drug intolerance, shock.
15. Summary and repetition.

**Clasess 4th year**

Semester 7

**Classes:**

1 Cardiology for dentistry: coronary artery disease, heart failure, valvular heart disease – preparation of the patient with chronic circulatory disorders for dental procedures.

2 Respiratory tract disorders – asthma, COPD, respiratory insufficiency– preparation of the patient with chronic respiratory disorders for dental procedures.

3 Endocrine disorders – diabetes mellitus, disorders of pituitary, thyroid, parathyroid and suprarenal glands - preparation of the patient with endocrine disorders for dental procedures.

4 Hematological disorders - anemia, bleeding diathesis, leukemias - preparation of the patient with hematological disorders for dental procedures. Transfusion of blood products.

5 Gastrointestinal tract disorders – GERD, gastritis, stomach ulcers, viral hepatitis, liver cirrhosis, cholecystolithiasis (gallbladder stones), inflammatory bowel diseases – preparation of the patient with chronic gastrointestinal tract disorders for dental procedures.

6 Urinary tract disorders - chronic kidney disease - preparation of the patient with chronic kidney disease and renal replacement therapy for dental procedures.

7 Neurologic disorders – Parkinson's disease, epilepsy - preparation of the patient with chronic neurologic disorders for dental procedures.

8 Disorders of oral cavity in internal diseases.

9 Infectious diseases. Fever of unknown origin. Antimicrobial prophylaxis and treatment in dental procedures.
10 Acute cardiac care in the dental office – principles of cardiopulmonary resuscitation.
11 Acute respiratory failure. Clinical signs, diagnosis and treatment, principles of cardiopulmonary resuscitation.
12 Principles of immunosuppressive treatment. Oral cavity sanitation before introduction of IS therapy. Antimicrobial prophylaxis.
13 Infected focus derived diseases diagnostic tests, symptoms and treatment.
14 Summary and repetition.

Other
1.
2.
3.
*etc. …*

Basic literature (list according to importance, no more than 3 items)
1. G. Herold „Internal medicine”,
2. „Harrison’s Principles of Internal Medicine”

Additional literature and other materials (no more than 3 items)
1.
2.
3.

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

Teaching room equipped with a projector, a computer with Internet access, a library science. Sale of patients.

Preliminary conditions (minimum requirements to be met by the student before starting the module/course)
basic knowledge of physiology, pathomorphology and pathophysiology

Conditions to receive credit for the course (specify the form 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)

| **Grade:** | **Criteria** (only for courses/modules ending with an examination) |
|---|---|
| Very Good (5.0) | Knowledge of issues related to the pathogenesis, symptomatology, treatment and prevention of diseases of the internal medicine is estimated at 95%. 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 diseases of the internal medicine is estimated at 90%. 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 diseases of the internal medicine is estimated at 80%. 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 diseases of the internal medicine is estimated at 70%. 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 diseases of the internal medicine is estimated at 60%. The student interprets medical research, makes a diagnosis, suggests treatment sufficiently. |

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

Department of Nephrology and Transplantation Medicine Ul. Borowska 213, 50-556 Wrocław,

tel 71 733 25 00; email: klinef@am.centrum.pl

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

dr hab. Oktawia Mazanowska , 717332500, oktawia.mazanowska@umed.wroc.pl

**List of persons conducting specific classes: full name, degree/scientific or professional title, discipline, performed profession, form of classes**.

Prof. Marian Klinger, Prof. Magdalena Krajewska, dr hab. Oktawia Mazanowska, dr hab. Mariusz Kusztal, dr hab. Mirosław Banasik, dr Dorota Kamińska, Dr Katarzyna Madziarska, dr Sławomir Zmonarski,

**Date of Syllabus development** **Syllabus developed by**

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**Signature of Head of teaching unit**

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Signature of Faculty Dean

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