SYLLABUS

Concerning the cycle of education 2021-2027

Academic year 2026/2027

1. BASIC INFORMATION CONCERNING THIS SUBJECT

| Course name | Internal Diseases |
|---|---|
| Course code * | ChW/E |
| Faculty (name of the leading direction) | Faculty of Medicine, University of Rzeszow |
| Department Name | Department of Internal Diseases |
| Field of study | Medicine |
| Level of education | Uniform Master's Degree |
| Profile | General Academic |
| Form of study | Stationary / non-stationary |
| Year and semester | Year VI |
| Type of course | Obligatory |
| Language of instruction | English |
| Coordinator | Assoc. Prof. Rafał Filip, MD, PhD |
| Name(s) of the instructor(s) | Assoc. Prof. Rafał Filip, MD, PhD Assoc. Prof. Mirosław Markiewicz, MD, PhD Assoc. Prof. Bogdan Kolarz, MD, PhD Łukasz Krupa, MD, PhD Grażyna Żyła, MD, PhD Renata Orłowska-Florek, MD, PhD Monika Kraśnicka, MD, PhD Piotr Wańczura, MD, PhD Dominika Wróblewska, MD Wojciech Kudła, MD Lizaveta Bradzikhina, MD Joanna Paśko, MD Joanna Sztembis, MD Mateusz Wiśniowski, MD Eliza Lis, MD Paweł Łańko, MD |

[|] Paweł Łańko, MD

* - according to the resolutions of the Faculty of Medicine

1.1. Forms of classes, number of hours and ECTS

| Lecture | Exercise | Conversation | Laboratory | Seminar | Practical | Self- learning | Number of points ECTS |
|---------|----------|--------------|------------|---------|-----------|----------------|-----------------------|
| - | 240 | - | - | - | - | 160 | 16 |

1.2. The form of class activities

⊠classes are in the traditional form

□ classes are implemented using methods and techniques of distance learning

1.3. Examination Forms; (exam, credit with grade or credit without grade)

2. REQUIREMENTS

Knowledge of internal diseases from semesters 7, 8, 9 and 10

3. OBJECTIVES, OUTCOMES, AND PROGRAM CONTENT USED IN TEACHING METHODS

3.1. Objectives of this course/module

| C1 | Mastering the ability to perform differential diagnosis, acquisition of diagnostic and therapeutic skills in patients treated outpatients and in the conditions of the internal ward, |
|----------------|---|
| C ₂ | Acquisition of practical skills in the field of medical history (contacting the patient), physical examination, selection and interpretation of additional tests, symptomatology of internal diseases. |
| C ₃ | Knowledge of the principles of diagnosing and conducting differential diagnosis of basic disease entities in the field of internal diseases, selection of appropriate laboratory tests and methods for imaging of internal organs and assessing their activities. |

3.2. Course/Module Learning Outcomes

| EK (the effect of | The content of the learning effect defined for the subject (module) | Reference to |
|----------------------|---|------------------------|
| education) | | directional effects |
| | | (KEK) |
| EK_01 | environmental and epidemiological conditions of the most common diseases; | E. W1. |

| :: | | |
|-------------------|---|---------|
| EK_02 | causes, symptoms, principles of diagnosis and therapeutic procedures | E. W7. |
| | in relation to the most common internal diseases occurring in adults | |
| | and their complications: | |
| | 1. circulatory system diseases, including ischemic heart disease, | |
| | heart defects, endocardium diseases, heart muscle diseases, | |
| | pericardium diseases, heart failure (acute and chronic), arterial | |
| | and venous vessel diseases, arterial hypertension - primary and | |
| | secondary, pulmonary hypertension, | |
| | 2. respiratory system diseases, including respiratory tract diseases, | |
| | chronic obstructive pulmonary disease, bronchial asthma, | |
| | bronchiectasis, cystic fibrosis, respiratory tract infections, | |
| | | |
| | interstitial lung diseases, pleura, mediastinum, obstructive and | |
| | central sleep apnea, respiratory failure (acute and chronic), | |
|] | respiratory system cancers, | |
|] | 3. digestive system diseases, including diseases of the oral cavity, | |
| | esophagus, stomach and duodenum, intestines, pancreas, liver, | |
| | bile ducts and gallbladder, | |
| | 4. diseases of the endocrine system, including diseases of the | |
| | hypothalamus and pituitary gland, thyroid, parathyroid glands, | |
| | adrenal cortex and medulla, ovaries and testicles, as well as | |
| | neuroendocrine tumors, multiglandular syndromes, various types | |
| | of diabetes and metabolic syndrome – hypoglycemia, obesity, | |
| | dyslipidemia, | |
|] | 5. kidney and urinary tract diseases, including acute and chronic | |
| | renal failure, glomerular and interstitial kidney diseases, kidney | |
| | cysts, nephrolithiasis, urinary tract infections, urinary tract | |
|] | tumors, in particular the bladder and kidney, | |
| | 6. haematopoietic system diseases, including bone marrow aplasia, | |
| | . , | |
| | anemia, granulocytopenia and agranulocytosis, | |
| | thrombocytopenia, acute leukemia, myeloproliferative and | |
| | myelodysplastic neoplasms, myelodysplastic syndromes, tumors | |
| | from mature B and T lymphocytes, hemorrhagic diathesis, | |
| | thrombophilia, life-threatening conditions in hematology, blood | |
| | disorders in diseases of other organs, | |
| | 7. rheumatic diseases, including systemic connective tissue diseases, | |
| | systemic vasculitis, arthritis with spinal involvement, metabolic | |
| | bone diseases, in particular osteoporosis and degenerative joint | |
| | disease, gout, allergic diseases, including anaphylaxis and | |
| | anaphylactic shock and angioedema | |
| EK_o ₃ | possibilities and limitations of laboratory tests in emergency | E. W41. |
| | situations; | • |
| | , | |
| | | |
| F./ | indications for the trail of the first | - N/ |
| EK_o4 | indications for the implementation of monitored therapy | E. W42. |
| | | |
| | | |
| | | |
| <u> </u> | 1 | |

| F | | |
|-------|---|---------|
| EK_05 | conduct a medical interview with an adult patient; | E. U1. |
| EK_o6 | conduct a complete and focused physical examination of an adult patient; | E. U3. |
| EK_07 | assess the patient's general condition, state of consciousness and awareness | E. U7. |
| EK_o8 | perform differential diagnosis of the most common diseases of adults and children | E. U12. |
| EK_o9 | recognize conditions that pose a direct threat to life; | E. U14. |
| EK_10 | plan diagnostic, therapeutic and preventive procedures; | E. U16. |
| EK_11 | interpret laboratory test results and identify causes of deviations from the norm; | E. U24. |
| EK_12 | administer nutritional therapy, including enteral and parenteral nutrition; | E. U25. |
| EK_12 | perform basic medical procedures and treatments, including: measurement of body temperature (superficial and deep), pulse measurement, non-invasive blood pressure measurement, monitoring of vital signs using a cardiomonitor, pulse oximetry, spirometric testing, oxygen therapy, assisted and substitute ventilation, insertion of an oropharyngeal tube, intravenous, intramuscular and subcutaneous injections, cannulation of peripheral veins, collection of peripheral venous blood, collection of blood for culture, collection of arterial blood, collection of arterialized capillary blood, taking swabs from the nose, throat and skin, catheterization of the urinary bladder in women and men, gastric probing, gastric lavage, enema, standard resting electrocardiogram with interpretation, electrical cardioversion and defibrillation of the heart, | E. U29. |

| | a cimple strip tests and measurement of blood alusesse | |
|-------|--|----------------------|
| | 9. simple strip tests and measurement of blood glucose; | |
| EK_13 | assist in performing the following medical procedures and treatments: 1. transfusion of blood products and blood derivatives, 2. drainage of the pleural cavity, 3. puncture of the pericardial sac, 4. puncture of the peritoneal cavity, 5. lumbar puncture, 6. fine-needle biopsy, 7. skin tests, 8. intradermal and scarification tests and interpret their results; | E. U30. |
| EK_14 | plan specialist consultations; | E. U32. |
| EK_15 | recognize the patient's agony and confirm his death; | E. U ₃₇ . |
| EK_16 | maintain the patient's medical records. | E. U ₃ 8. |
| EK_17 | establish and maintain a deep and respectful contact with the patient, as well as showing understanding for ideological and cultural differences; | K.01. |
| EK_18 | accept responsibility for decisions made in the course of professional activity, including those relating to one's own safety and the safety of others. | K.11. |
| | | |

3.3. Course content

A. Classes

Course contents

Practical teaching in the field of Cardiology:

- a) medical history, physical examination, differential diagnosis
- $b)\ interpretation\ of\ laboratory\ tests$
- c) assessment of the patient's condition
- d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures

f) undertaking preventive and curative measures in the event of a threat to life

keeping medical records

Practical teaching in the field of Gastroenterology:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c) assessment of the patient's condition
- d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life

keeping medical records

Practical teaching in the field of Endocrinology:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c) assessment of the patient's condition
- d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life

keeping medical records

Practical teaching in the field of Pulmonology:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c) assessment of the patient's condition
- d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life
- g) keeping medical records

Practical teaching in the field of Allergology:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c)assessment of the patient's condition
- d)planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life keeping medical records

Practical teaching in the field of Nephrology:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c)assessment of the patient's condition
- d)planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life

keeping medical records

Practical teaching in the field of Hematology:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c)assessment of the patient's condition
- d)planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life

keeping medical records

Practical teaching in the field of Rheumatology:

- a) medical history, physical examination, differential diagnosis
- b) interpretation of laboratory tests
- c)assessment of the patient's condition
- d)planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations
- e) performing medical procedures and procedures
- f) undertaking preventive and curative measures in the event of a threat to life

keeping medical records

3.4. Methods of Instruction

Exercises: working with the patient, analyzing diagnostic tests

Student's own work: work with a book

4. METHODS AND EVALUATION CRITERIA

4.1. Methods of verification of learning outcomes

| Symbol of effect | Methods of assessment of learning outcomes Eg.: tests, oral exams, written exams, project reports, observations during classes) | Form of classes |
|------------------|---|-----------------|
| EK_01 | Oral or written exam | Exercises |
| EK_02 | Credit with a grade based on the student's observation including: | |
| EK_o3 | - Attendance | |

| EK_o4 | - implementation of commissioned tasks | |
|-------|--|--|
| EK_05 | | |
| EK_o6 | | |
| EK_07 | | |
| EK_o8 | | |
| EK_09 | | |
| EK_10 | | |
| EK_11 | | |
| EK_12 | | |
| EK_13 | | |
| EK_14 | | |
| EK_15 | | |
| EK_16 | | |
| EK_17 | | |
| EK_18 | | |

4.2. Conditions for completing the course (evaluation criteria)

Written or oral exam.

Evaluation criteria

- 5.0 has knowledge of the education content at the level of 93% -100%
- 4.5 has knowledge of the content of education at the level of 85% -92%
- 4.0 has knowledge of the content of education at the level of 77% -84%
- 3.2 has knowledge of the content of education at the level of 69% -76%
- 3.0 has knowledge of the content of education at the level of 60% -68%
- 2.0 has knowledge of the educational content below 60%

Exercises - practical clinical teaching

Daily clinical assessment (evaluation of the procedure for each procedure)

Single direct observation (observation while receiving one patient)

Long-term observation (summary assessment of many skills for a long time)

Evaluation criteria

- 5.0 has knowledge of the education content at the level of 93% -100%
- 4.5 has knowledge of the content of education at the level of 85% -92%
- 4.0 has knowledge of the content of education at the level of 77% -84%
- 3.5 has knowledge of the content of education at the level of 69% -76%
- 3.0 has knowledge of the content of education at the level of 60% -68%
- 2.0 has knowledge of the educational content below 60%

5. TOTAL STUDENT WORKLOAD REQUIRED TO ACHIEVE THE INTENDED LEARNING OUTCOMES IN HOURS AND ECTS CREDITS

| Form of activity | The average number of hours to complete the activity |
|---|--|
| Contact hours (with the teacher) resulting from the study schedule of classes | 240 |
| Contact hours (with the teacher) participation in the consultations, exams | 3 |
| Non-contact hours - student's own work | 160 |
| (preparation for classes, exam, writing a paper, etc.) | |
| SUM OF HOURS | 403 |
| TOTAL NUMBER OF ECTS | 16 |

^{*} It should be taken into account that 1 ECTS point corresponds to 25-30 hours of total student workload.

6. TRAINING PRACTICES IN THE SUBJECT

| Number of hours | - |
|-----------------------------------|---|
| Rules and forms of apprenticeship | - |

7. LITERARURE

Basic literature:

• Jaeschke, R., Gajewski, P., & O'Byrne, P. M. (red.). *McMaster Textbook of Internal Medicine* 2019/2020. Kraków: Medycyna Praktyczna / Empendium, 2019. ISBN 978-83-7430-602-7.

Additional literature:

- Bickley, L. S., Szilagyi, P. G., Hoffman, R. M., & Soriano, R. P. Bates's Guide to Physical Examination and History Taking. Wolters Kluwer Health, 2023. ISBN 978-1-9752-1054-0.
- Loscalzo, J., Fauci, A., Kasper, D., Hauser, S., Longo, D., & Jameson, J. L. Harrison's Principles of Internal Medicine (21st ed., Vol. 1 & 2). McGraw Hill / Medical, 2022. ISBN 978-1-264-26850-4.
- Innes, J. A., Dover, A. R., & Fairhurst, K. *Macleod's Clinical Examination* (15th ed.). Elsevier, 2023. ISBN 978-0-323-84770-4.

Approved by the Head of the Department or an authorised person