

SYLLABUS  
concerning the cycle of education 2019-2025  
(date range)

**1.1. BASIC INFORMATION CONCERNING THIS SUBJECT / MODULE**

|                                            |                                              |
|--------------------------------------------|----------------------------------------------|
| Subject / Module                           | <b>Internal diseases</b>                     |
| Course code / module *                     | <b>ChW/E</b>                                 |
| Faculty of (name of the leading direction) | <b>Medical College of Rzeszów University</b> |
| Department Name                            | <b>Medical College of Rzeszów University</b> |
| Field of study                             | <b>medical direction</b>                     |
| Level of education                         | <b>uniform master's studies</b>              |
| Profile                                    | <b>practical</b>                             |
| Form of study                              | <b>stationary / extramural</b>               |
| Year and semester                          | <b>year V, semester X</b>                    |
| Type of course                             | <b>obligatory</b>                            |
| Coordinator                                | <b>Dr hab. n. med. Rafał Filip</b>           |
| First and Last Name of the Teacher         |                                              |

\* - According to the resolutions of the Faculty of Medicine

**1.2. Forms of classes, number of hours and ECTS**

| Lecture | Exercise | Conversation | Laboratory | Seminar | ZP | Practical | Self-learning | Number of points ECTS |
|---------|----------|--------------|------------|---------|----|-----------|---------------|-----------------------|
| -       | 240      | -            | -          | -       | -  | -         | 160           | <b>16</b>             |

**1.3. The form of class activities**

☒ classes are in the traditional form

☐ classes are implemented using methods and techniques of distance learning

**1.4. Examination Forms / module (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,                                                                             |
| C2 | acquisition of practical skills in the field of medical history (making contact with the patient), physical examination, selection and interpretation of additional tests, symptomatology of internal diseases.                                                   |
| C3 | 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 OUTCOMES FOR THE COURSE / MODULE (TO BE COMPLETED BY THE COORDINATOR)

| EK (the effect of education) | The content of the learning effect defined for the subject (module)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Reference to directional effects (KEK) |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| EK_01                        | <p>knows and understands the causes, symptoms, principles of diagnosis and therapeutic treatment in relation to the most common internal diseases occurring in adults, and their complications: knows and understands the causes, symptoms, principles of diagnosis and therapeutic treatment in relation to the most common</p> <p>internal diseases occurring in adults and their complications:</p> <p>a) cardiovascular diseases, including: ischemic heart disease, heart disease, endocardial disease, heart muscle, pericardium, heart failure (acute and chronic), arterial and venous arterial disease, hypertension:</p> <p>primary and secondary, pulmonary hypertension,</p> <p>b) respiratory diseases, including: respiratory diseases, chronic obstructive pulmonary disease, asthma</p> <p>of bronchial tubes, bronchiectasis, cystic fibrosis, respiratory tract infections, interstitial</p> <p>lung, pleura, mediastinum, obstructive and central sleep apnea, respiratory failure</p> <p>(acute and chronic), respiratory cancers,</p> <p>c) diseases of the digestive system, including diseases of the mouth, esophagus, stomach and duodenum, intestines, pancreas, liver, bile ducts and gallbladder,</p> <p>d) diseases of the endocrine system, including diseases of the hypothalamus and pituitary gland, thyroid gland, parathyroid glands,</p> | E.W7.                                  |

|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |        |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
|       | <p>cortex and adrenal medulla, ovaries and testicles, as well as neuroendocrine tumors, polyglandular syndromes,</p> <p>different types of diabetes and metabolic syndrome: hypoglycaemia, obesity, dyslipidemia,</p> <p>e) kidney and urinary tract diseases, including: acute and chronic renal failure, glomerular diseases</p> <p>renal and interstitial kidneys, renal cysts, kidney stones, urinary tract infections, tumors</p> <p>urinary system, in particular bladder cancer and kidney cancer,</p> <p>f) hematopoietic system diseases, including: bone marrow aplasia, anemia, granulocytopenia and agranulocytosis, thrombocytopenia,</p> <p>acute leukemias, myeloproliferative and myelodysplastic-myeloproliferative tumors,</p> <p>myelodysplastic syndromes, tumors from mature B and T lymphocytes, bleeding disorders, thrombophilia,</p> <p>conditions of direct threat to life in hematology, blood disorders in diseases of other organs; g) rheumatic diseases, including: connective tissue systemic diseases, systemic vasculitis, arthritis</p> <p>with spine involvement, bone metabolic diseases, in particular osteoporosis and osteoarthritis</p> <p>joints, gout,</p> <p>h) allergic diseases, including: anaphylaxis and anaphylactic shock and angioedema,</p> <p>i) water-electrolyte and acid-base disorders: dehydration conditions, conduction states, disorders</p> <p>electrolyte management, acidosis and alkalosis;</p> |        |
| EK_02 | performs a medical interview with an adult patient                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | E.U1.  |
| EK_03 | performs a full and targeted physical examination of an adult patient                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | E.U3.  |
| EK_04 | evaluates the general condition, state of consciousness and awareness of the patient                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | E.U7.  |
| EK_05 | performs differential diagnosis of the most common diseases of adults and children                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | E.U12. |
| EK_06 | recognizes states of immediate life threat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | E.U14. |
| EK_07 | plans diagnostic, therapeutic and prophylactic procedures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | E.U16. |
| EK_08 | interprets laboratory tests and identifies the causes of deviations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | E.U24. |
| EK_09 | can apply nutritional treatment (including enteral and parenteral nutrition)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | E.U25. |

|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |        |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| EK_10 | <p>can perform basic procedures and medical procedures, including:</p> <ul style="list-style-type: none"> <li>a) body temperature measurement, heart rate measurement, non-invasive blood pressure measurement,</li> <li>b) monitoring of vital signs using a cardiomonitor, pulse oximetry,</li> <li>c) spirometry test, oxygen treatment, assisted and replacement ventilation,</li> <li>d) introduction of the oropharyngeal tube,</li> <li>e) intravenous, intramuscular and subcutaneous injections, peripheral vein cannulation, peripheral blood sampling</li> </ul> <p>venous blood collection, arterial blood sampling, arterial capillary blood collection,</p> <ul style="list-style-type: none"> <li>f) collecting swabs from the nose, throat and skin, puncture of the pleural cavity,</li> <li>g) catheterization of the bladder in men and women, probing the stomach, gastric lavage, enema,</li> <li>h) standard resting electrocardiogram with interpretation, electrical cardioversion and defibrillation</li> </ul> <p>heart's,</p> <ul style="list-style-type: none"> <li>i) simple test strips and blood glucose measurement;</li> </ul> | E.U29. |
| EK_11 | <p>Assists in the following procedures and medical procedures:</p> <ul style="list-style-type: none"> <li>a) transfusion of blood and blood products,</li> <li>b) drainage of the pleural cavity,</li> <li>c) puncture of the pericardial sac,</li> <li>d) puncturing the peritoneal cavity,</li> <li>e) lumbar puncture,</li> <li>f) thin-needle biopsy,</li> <li>g) epidermal tests,</li> <li>h) intradermal and scarification tests and interpret their results;</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | E.U30. |
| EK_12 | can plan specialist consultations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | E.U32. |
| EK_13 | recognizes the agony of the patient and determines the patient's death                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | E.U37. |
| EK_14 | can manage the patient's medical records                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | E.U38. |
| EK_15 | He is able to establish and maintain a deep and respectful contact with the patient                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | K.01.  |
| EK_16 | Respects medical confidentiality and patient's rights                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | K.03.  |

### 3.3 CONTENT CURRICULUM (filled by the coordinator)

#### A. Lectures

| Course contents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Practical teaching in the field of Cardiology:</p> <ul style="list-style-type: none"><li>a) medical history, physical examination, differential diagnosis</li><li>b) interpretation of laboratory tests</li><li>c) assessment of the patient's condition</li><li>d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations</li><li>e) performing medical procedures and procedures</li><li>f) undertaking preventive and curative measures in the event of a threat to life</li><li>g) keeping medical records</li></ul>       |
| <p>Practical teaching in the field of Gastroenterology:</p> <ul style="list-style-type: none"><li>a) medical history, physical examination, differential diagnosis</li><li>b) interpretation of laboratory tests</li><li>c) assessment of the patient's condition</li><li>d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations</li><li>e) performing medical procedures and procedures</li><li>f) undertaking preventive and curative measures in the event of a threat to life</li><li>g) keeping medical records</li></ul> |
| <p>Practical teaching in the field of Endocrinology:</p> <ul style="list-style-type: none"><li>a) medical history, physical examination, differential diagnosis</li><li>b) interpretation of laboratory tests</li><li>c) assessment of the patient's condition</li><li>d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations</li><li>e) performing medical procedures and procedures</li><li>f) undertaking preventive and curative measures in the event of a threat to life</li><li>g) keeping medical records</li></ul>    |
| <p>Practical teaching in the field of Pulmonology:</p> <ul style="list-style-type: none"><li>a) medical history, physical examination, differential diagnosis</li><li>b) interpretation of laboratory tests</li></ul>                                                                                                                                                                                                                                                                                                                                                |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>c) assessment of the patient's condition</li> <li>d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations</li> <li>e) performing medical procedures and procedures</li> <li>f) undertaking preventive and curative measures in the event of a threat to life</li> <li>g) keeping medical records</li> </ul>                                                                                                                                                                                 |
| <p>Practical teaching in the field of Allergology:</p> <ul style="list-style-type: none"> <li>a) medical history, physical examination, differential diagnosis</li> <li>b) interpretation of laboratory tests</li> <li>c) assessment of the patient's condition</li> <li>d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations</li> <li>e) performing medical procedures and procedures</li> <li>f) undertaking preventive and curative measures in the event of a threat to life</li> <li>g) keeping medical records</li> </ul> |
| <p>Practical teaching in the field of angiology:</p> <ul style="list-style-type: none"> <li>a) medical history, physical examination, differential diagnosis</li> <li>b) interpretation of laboratory tests</li> <li>c) assessment of the patient's condition</li> <li>d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations</li> <li>e) performing medical procedures and procedures</li> <li>f) undertaking preventive and curative measures in the event of a threat to life</li> <li>g) keeping medical records</li> </ul>   |
| <p>Practical teaching in the field of Nephrology:</p> <ul style="list-style-type: none"> <li>a) medical history, physical examination, differential diagnosis</li> <li>b) interpretation of laboratory tests</li> <li>c) assessment of the patient's condition</li> <li>d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations</li> <li>e) performing medical procedures and procedures</li> <li>f) undertaking preventive and curative measures in the event of a threat to life</li> <li>g) keeping medical records</li> </ul>  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Practical teaching in the field of Hematology:</p> <ul style="list-style-type: none"> <li>a) medical history, physical examination, differential diagnosis</li> <li>b) interpretation of laboratory tests</li> <li>c) assessment of the patient's condition</li> <li>d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations</li> <li>e) performing medical procedures and procedures</li> <li>f) undertaking preventive and curative measures in the event of a threat to life</li> <li>g) keeping medical records</li> </ul>   |
| <p>Practical teaching in the field of Rheumatology:</p> <ul style="list-style-type: none"> <li>a) medical history, physical examination, differential diagnosis</li> <li>b) interpretation of laboratory tests</li> <li>c) assessment of the patient's condition</li> <li>d) planning of diagnostic, prophylactic and therapeutic procedures, specialist consultations</li> <li>e) performing medical procedures and procedures</li> <li>f) undertaking preventive and curative measures in the event of a threat to life</li> <li>g) keeping medical records</li> </ul> |

### 3.4 TEACHING METHODS

**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                                                                                                                  |                 |
| EK_02<br>EK_03<br>EK_04<br>EK_05<br>EK_06<br>EK_07<br>EK_08<br>EK_09<br>EK_10 | credit with the grade based on the student's observation including:<br><br>- attendance<br><br>- implementation of commissioned tasks | Exercises       |

|       |  |  |
|-------|--|--|
| EK_11 |  |  |
| EK_12 |  |  |
| EK_13 |  |  |
| EK_14 |  |  |
| EK_15 |  |  |
| EK_16 |  |  |

#### 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%

3.5 - 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%

##### **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 desired result in hours and ECTS credits

| Activity                                            | Hours / student work |
|-----------------------------------------------------|----------------------|
| Hours of classes according to plan with the teacher | 240                  |
| Preparation for classes                             | 60                   |
| Participation in the consultations                  | 2                    |
| The time to write a paper / essay                   | -                    |

|                            |     |
|----------------------------|-----|
| Preparation for tests      | 100 |
| Participation in colloquia | 1   |
| Other (e-learning)         | -   |
| SUM OF HOURS               | 403 |
| TOTAL NUMBER OF ECTS       | 16  |

#### 6. TRAINING PRACTICES IN THE SUBJECT / MODUL

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

#### 6. LITERATURE

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>READING:</b></p> <ol style="list-style-type: none"> <li>1. Kokot F. (red), „Choroby wewnętrzne” Wydawnictwo Lekarskie PZWL, W-wa 2006</li> <li>2. Tatoń J., Czech A., „Ogólna diagnostyka internistyczna”, Wydawnictwo Lekarskie PZWL 1991.</li> <li>3. Kokot F.: Diagnostyka różnicowa objawów chorobowych. PZWL2007</li> </ol> <p>Szczeklik A. red.: Choroby wewnętrzne aktualny stan wiedzy 2010, wyd. Medycyna Praktyczna 2010</p>                                                                                       |
| <p>Additional literature:</p> <ol style="list-style-type: none"> <li>1. Szczeklik A., Gajewski P.: „Choroby wewnętrzne 2009 – kompendium.”, Medycyna Praktyczna, Kraków, 2009</li> <li>2. Dacre J., Kopelman P., Badanie kliniczne, PZWL 2004</li> <li>3. Tatoń J., Czech A., Diagnostyka internistyczna, PZWL, 2005.</li> <li>4. Toy E., Patlan J., Faustinella F. Ciekawe przypadki internistyczne, PZWL, 2009.</li> <li>5. Herold G., Medycyna wewnętrzna- repetytorium dla studentów medycyny i lekarzy, PZWL, 2008</li> </ol> |

Acceptance Unit Manager or authorized person