Appendix number 1.5 to The Rector UR Resolution No. 12/2019

SYLLABUS

**concerning the cycle of education 2022-2028**

(date range)

## 1.1. BASIC INFORMATION CONCERNING THIS SUBJECT / MODULE

| | |
|---|---|
| Subject / Module | **Oncology** |
| Course code / module * | **Onk/E** |
| Faculty of (name of the leading direction) | **Medical College of Rzeszów University** |
| Department Name | **Medical College of Rzeszów University** |
| Field of study | **medical direction** |
| Level of education | **uniform master's studies** |
| Profile | **practical** |
| Form of study | **stationary / extramural** |
| Year and semester | **year V, semester X** |
| Type of course | **obligatory** |
| Coordinator | **Prof. Bożenna Karczmarek-Borowska** |
| 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** |
|---|---|---|---|---|---|---|---|---|
| 15 | 25 | - | - | 20 | - | - | - | **3** |

## 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 topographic and functional human anatomy, knowledge of neuroanatomy, physiology. News in the field of oncology propaedeutics.

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

### 3.1. Objectives of this course/module

| | |
|---|---|
| C1 | To familiarize students with knowledge about pathogenesis (including molecular bases), diagnostics (including laboratory and medical diagnostics) and cancer treatment. |
| C2 | Shaping the skills of oncological alertness, attention to the early symptoms of cancer. |
| C3 | Acquainting with the gradation of tumors and the practical application of tumor markers. |
| C4 | Determining the importance of dealing with the patient after completing oncological treatment. |

### 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 | knows the environmental and epidemiological conditions of the most common human cancers | E.W23. |
| EK_02 | knows the basics of early detection of tumors and the principles of screening in oncology | E.W24. |
| EK_03 | knows the possibilities of modern cancer therapy (including multimodal therapy), perspectives of cell and gene therapies and their undesirable effects | E.W25. |
| EK_04 | knows the rules of combination therapies in oncology, algorithms of diagnostic and therapeutic procedures in the most common human cancers | E.W26. |
| EK_05 | knows and understands the causes, symptoms, principles of diagnosing and therapeutic procedures in the most common problems of palliative medicine, including:<br>a) symptomatic treatment of the most common somatic symptoms,<br>b) the treatment of cancerous wasting and the prevention and treatment of pressure ulcers,<br>c) the most frequent emergencies in palliative medicine; | E.W27. |
| EK_06 | knows the rules of palliative treatment with the patient in the terminal state | E.W28. |
| EK_07 | knows the principles of pain treatment, including cancer and chronic pain | E.W29. |
| EK_08 | plans diagnostic, therapeutic and prophylactic procedures | E.U16. |

| | | |
|---|---|---|
| EK_09 | defines states in which the duration of life, functional state or preferences of the patient limit the treatment in accordance with the guidelines laid down for a given disease | E.U21. |
| EK_10 | can establish and maintain a deep and respectful contact with the patient | K.01. |
| EK_11 | respects medical confidentiality and patient's rights | K.03. |

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

**A. Lectures**

| **Course contents** |
|---|
| Molecular basis of carcenogenesis. |
| Molecular basis of metastatic processes. |
| Molecular indicators of cancer processes. |
| Basics of oncology. Epidemiology of tumors. Primary and secondary prevention (screening). |
| The basics of knowledge about the types of cancer. Lung cancer in Poland. |
| Cancer-induced bone disease. Metastatic bone disease. |
| Neuroendocrine neoplasms. |
| Pre-cancerous conditions. |

**B**. **Exercises**

| **Course contents** |
|---|
| Organizational and introductory classes. Familiarizing students with problems, pass criteria. |
| Clinical and visual diagnosis of lung cancer. |
| Cancers of the lymphatic system. |
| Elements of radiotherapy, therapy and photodynamic diagnosis |
| Female reproductive organs: cervical cancer, endometrial cancer, ovarian cancer, vulvar cancer |
| Head and neck cancer. The importance of modern diagnostic imaging. Modern operational methods. |
| Skin cancers. Differential diagnosis of pre-cancerous conditions, benign and malignant neoplasms, and pseudo-cancerous skin tumors |
| Cancer of the genitourinary system |

| |
|---|
| Chest tumors and nipple |
| Malignant neoplasms of the digestive system |

**C. Seminars**

| **Course contents** |
|---|
| Etiopathogenesis of lung cancer, diagnostic tests, treatment of lung cancer |
| Cancers of the lymphatic system |
| Radiotherapy - physical basis. |
| Diagnosis of reproductive organs<br>- imaging examinations: ultrasound, KT, magnetic resonance, PET,<br>- tumor markers<br>- principles of gynecological examination and implementation and discussion of small therapeutic and diagnostic procedures. |
| Cancer of the base of the skull. Modern diagnostic approach to head and neck cancer. |
| Factors that predispose to skin carcinogenesis. The role of UV radiation. The role of viruses. Prevention of skin cancers. The importance of early detection of cancer. |
| Diagnosis of urinary tract tumors. Treatment of urinary tract cancers. |
| Chest tumors and nipple |
| Epidemiology of neoplastic diseases of the digestive system |

### 3.4 TEACHING METHODS

**Lecture**: multimedia presentation.

**Exercises**: Case analysis

**Seminars**: multimedia presentation

**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<br>EK_02<br>EK_03<br>EK_04 | final oral or written exam | Lecture |

| | | |
|---|---|---|
| EK_05<br>EK_06<br>EK_07 | | |
| EK_ 01<br>EK_02<br>EK_03<br>EK_04<br>EK_05<br>EK_06<br>EK_07 | Written or oral colloquium from a given batch of material | Exercises |
| EK_08<br>EK_09<br>EK_10<br>EK_11 | Practical credit - case study | Exercises |
| EK_ 01<br>EK_02<br>EK_03<br>EK_04<br>EK_05<br>EK_06<br>EK_07 | Written or oral colloquium from a given batch of material | Seminars |

4.2 Conditions for completing the course (evaluation criteria)

**Lectures**:

1. Test exam and open or oral questions:

A: Questions in the field of messages to remember;

B: Questions in the field of speech to understand;

C: Solving a typical written task;

D: Solving an atypical writing task;

- for insufficient solution of tasks only from areas A and B = grade 2.0

- for solving tasks only from areas A and B, the possibility of obtaining max. rating 3.0

- for solving tasks from the area A + B + C, the possibility of obtaining max. evaluation 4.0

- for the solution of tasks in the area A + B + C + D, the possibility of obtaining a rating of 5.0

**Knowledge rating (EK_01, EK_02, EK_03, EK_04, EK_05, EK_06, EK_07):**

Written test

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, seminars:**

1. full participation and activity in the exercises

2. written partial credits

**Knowledge rating (EK_01, EK_02, EK_03, EK_04, EK_05, EK_06, EK_07):**

Written test

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%

**Skill assessment (EK_08, EK_09)**

5.0 - the student actively participates in the classes, is well prepared, knows the basics of early cancer detection and the principles of screening in oncology, plans the diagnostic, therapeutic and prophylactic procedures correctly

4.5 - the student actively participates in the classes, knows the basics of early cancer detection and the principles of screening in oncology, correctly plans the diagnostic, therapeutic and prophylactic procedures

4.0 - the student actively participates in the classes, is improved, knows the basics of early detection of cancer and the principles of screening in oncology, usually correctly plans the diagnostic, therapeutic and prophylactic procedures

3.5 - the student participates in classes, his scope of preparation does not allow for a comprehensive presentation of the discussed problem, he knows the basics of early detection of cancer and the principles of screening in oncology, plans diagnostic, therapeutic and prophylactic procedures, is often improved

3.0 - the student participates in the classes, knows the basics of early detection of cancer and the principles of screening in oncology, plans the diagnostic, therapeutic and preventive procedures, but often makes mistakes

2.0 - the student passively participates in the classes, the statements are incorrect in substance, do not know the basics of early detection of tumors and the principles of screening in oncology, plan the diagnostic, therapeutic and preventive actions incorrectly, often corrected

**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 | 60 |
| Preparation for classes | 10 |

| | |
|---|---|
| Participation in the consultations | 2 |
| The time to write a paper / essay | - |
| Preparation for tests | 5 |
| Participation in colloquia | **1** |
| Other (e-learning) | - |
| SUM OF HOURS | **78** |
| TOTAL NUMBER OF ECTS | **3** |

## 6. TRAINING PRACTICES IN THE SUBJECT / MODUL

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

## 6. LITERATURE

**READING:**

1. Kordek R, Jassem J, Krzakowski M, Jeziorski A, Kornafel J, Pawlęga J: ONKOLOGIA Podręcznik dla studentów i lekarzy. Wyd. Via Medica, Gdańsk 2007, wyd. 3.
2. Krzakowski M.: Onkologia kliniczna. Tom I i II. Wyd. Med. „BORGIS". Warszawa 2006, wyd. 2.
3. Krzakowski M, Herman K, Jassem J, Jędrzejczak W, Kowalczyk JR, Podolak-Dawidziak M, Reinfuss M: Zalecenia postępowania diagnostyczno-terapeutycznego w nowotworach złośliwych. Wyd. Via Medica, Gdańsk 2009.
4. Kułakowski A., Skowrońska-Gardas A.: Onkologia – podręcznik dla studentów medycyny. Wyd. PZWL. Warszawa 2003.

Additional literature:

1. Od objawu do nowotworu. Wczesne rozpoznawanie chorób nowotworowych u dzieci, Alicja Chybicka
   Elsevier Urban & Partner, 2013,
2. Atlas stopni zaawansowania nowotworów złośliwych według AJCC, F.L. Greene, C.C. Compton, A.G. Fritz, J. Shah, D.P. Winchester
   Medipage, 2009
3. Diagnostyka obrazowa raka sutka - tom 1-2 (komplet), Marie Tartar, Christopher E. Comstock, Michael S. Kipper, red. wyd. pol. Ewa Wesołowska
   Elsevier Urban & Partner, 2010
4. Leczenie bólów nowotworowych, Jerzy Jarosz
   2009

Acceptance Unit Manager or authorized person