



UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN
Faculty of Medicine

Course syllabus – part A

USOS Code: 48SJ-ONC

ECTS: 4.00

Cycle: 2026Z

Oncology Oncology

Legal acts specifying learning outcomes:
672/2020;

Discipline: Medical Sciences

Course status: Obligatory

Group of courses: B - major course

ISCED Code: 0912

Field of studies: Medicine

Field: Medicine

Learning profile: -

Form of studies: full-time

Level of studies: uniform master's studies

Year/Semester: 5th year 9th semester, Medicine
in English

Classes types: Lecture; Seminar; Classes;

Classes: Lecture (10h); Seminar (10h); Classes
(45h);

Language: ANG

Introductory subject: Ability to physical examination of the patient, knowledge of anatomy and histology of particular organs, knowledge of basic imaging, functional and laboratory knowledge of the etiology and epidemiology of cancer.

Prerequisites: knowledge of basic imaging, functional and laboratory knowledge of the etiology and epidemiology of cancer.

Organized by the unit:

Coordinators responsible for the course:

Dawid Sigorski, dawid.sigorski@uwm.edu.pl

SUBJECT MATTER CONTENT:

Classes – Preparation of the medical history of a cancer patient: a) physical and subjective examination, with particular attention to the interview focused on the diagnosis of cancer, environmental and genetic predispositions, b) planning of diagnostic tests, c) interpretation of the results of laboratory, imaging, functional and histopathological tests, d) making a differential and final diagnosis, e) grading the cancer, f) planning oncological treatment appropriate to the stage of cancer advancement, in an appropriate sequence (surgical treatment, systemic treatment and radiotherapy), g) planning diagnosis, treatment and control of possible side effects of oncological treatment, h) planning the assessment of treatment results, i) recognizing symptoms accompanying cancer and proposing appropriate treatment - e.g. cancer cachexia, pain, j) identifying nutritional needs and planning possible dietary treatment, including paraenteric treatment, k) identifying psychological and social needs, proposing remedial actions, l) proposing possible genetic counseling, m) planning follow-up tests

Lecture – Biology of cancer disease: oncogenesis, cell division disorders, cancer transformation, oncogenes, proto-oncogenes, tumor suppressor genes, characteristics of cancer cells, apoptosis. Fundamentals of modern cancer diagnosis and treatment: what is a cure in oncology, 5-year survival rates, mortality, primary and secondary cancer prevention, screening tests, cancer diagnosis methods, histopathological examination, tumor markers, cancer staging, malignancy grade, TNM system, clinical staging, cancer treatment strategies, radical treatment, palliative treatment, combined treatment, prognostic and predictive factors. Radiotherapy of cancers: radical radiotherapy, palliative radiotherapy, types of radiation, interaction of ionizing radiation with an atom, with a cell, radiosensitivity and radiocurability of cancers, therapeutic index, dose fractionation, emergency conditions in oncology treated with radiotherapy, stereotactic radiotherapy, intraoperative radiotherapy, brachytherapy, acute and late complications of radiotherapy. Systemic treatment of cancers: classical chemotherapy, types of cytostatics, mechanism of action, administration routes, multi-drug regimens, radical and palliative chemotherapy, acute and late complications of chemotherapy, hormone therapy, targeted therapies, immunotherapy. Patient after cancer treatment: post-treatment follow-up, physical, social, and psychological problems, disability, rehabilitation, chronic fatigue, nutritional problems, sexual problems, pregnancy after cancer treatment, quality of life.

Seminar – 1. Cancers of the digestive tract. 2. Cancers of the genitourinary system. 3. Lung cancer and other chest cancers. 4. Breast cancer. 5. Cancers of the reproductive organs. 6. Cancers of the head and neck region. 7. Sarcomas and skin cancer. 8. Tumors of the central nervous system. Seminars 1-8: epidemiology and etiology of individual cancers, subjective and objective symptoms, environmental and genetic predispositions, screening tests, imaging and functional diagnostics, histopathological diagnosis, treatment methods, treatment results, post-treatment follow-up, palliative treatment. 9. Radiotherapy: types of radiotherapy - teletherapy and brachytherapy, designating areas for irradiation, determining critical areas, treatment planning, methods of

Additional notes:

dose fractionation. 10. Cancer pain: scale of the problem, causes of pain, types of pain, receptor pain, neuropathic pain, diagnosis, methods of pain assessment, principles of cancer pain treatment, WHO ladder, assessment of treatment effect, breakthrough pain - diagnosis, treatment, non-pharmacological treatment.

TEACHING OBJECTIVE:

Acquiring knowledge in the fields of oncogenesis, epidemiology, and etiology of cancers, with a particular emphasis on environmental and genetic factors, primary and secondary prevention; familiarizing oneself with the symptomatology and principles of clinical, imaging, functional, and histopathological diagnostics of cancers; learning the principles of treating the most common malignant tumors, emphasizing the role of combined treatment (surgical treatment, radiotherapy, and systemic treatment); acquiring knowledge about the importance and methods of palliative care in oncology; understanding the types of pain associated with cancer and the principles of diagnosing and treating cancer-related pain.

DESCRIPTION OF THE LEARNING OUTCOMES OF THE COURSE IN RELATION TO THE DESCRIPTION OF THE CHARACTERISTICS OF THE SECOND LEVEL LEARNING OUTCOMES FOR QUALIFICATIONS AT LEVELS 6-8 OF THE POLISH QUALIFICATION FRAMEWORK IN RELATION TO THE SCIENTIFIC DISCIPLINES AND THE EFFECTS FOR FIELDS OF STUDY

Symbols for outcomes related to the discipline:

Symbols for outcomes related to the field of study:

LEARNING OUTCOMES:

Knowledge (W1) – Topics in oncology, including: 1) Genetic, environmental, and epidemiological factors; causes, symptoms, principles of diagnosis, and therapeutic management in the most common cancers and their complications; 2) Most common paraneoplastic syndromes and their clinical symptoms; 3) Basics of early cancer detection, principles of screening tests, and preventive actions in oncology; 4) Opportunities and limitations of contemporary cancer treatment (surgical methods, radiotherapy, systemic methods including immunotherapy), indications for cellular and gene therapies, targeted and personalized treatment; 5) Early and late complications of oncological treatment; 6) Role of supportive care, including nutritional support; principles of organizing care for cancer patients, including genetic counseling and multidisciplinary care; 8) Practical aspects of statistics in oncology, including principles of interpreting results from clinical trials; 9) Key scales and classifications used in oncology; 10) Principles of conducting targeted physical examinations in adults focusing on breast and prostate gland; 11) Principles of planning diagnostic, therapeutic, and preventive procedures for cancer treatment based on test results and medical documentation.

Skills (U1) – Conduct a targeted physical examination of an adult focusing on the breasts and prostate gland; E. U19. Plan diagnostic, therapeutic, and preventive procedures for cancer treatment based on test results and provided medical documentation.

Social competences (K1) – Establishing and maintaining a deep and genuine respect in patient communication, as well as demonstrating understanding of cultural and worldview differences. Acting in the best interest of the patient. Upholding patient confidentiality and rights.

Symbols for outcomes related to the field of study:

Classes – ['K1', 'U1', 'W1'] –

Lecture – ['K1', 'U1', 'W1'] –

Seminar – ['K1', 'U1', 'W1'] – Colloquium test -Active participation in classes

FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Classes (Colloquium practical) – ['K1', 'U1', 'W1'] –

Lecture (Written exam) – ['K1', 'U1', 'W1'] – test 60 questions multiple choice 70% on credit.

Seminar (Colloquium test) – ['K1', 'U1', 'W1'] –

REQUIRED LITERATURE:

1. Cancer Society's Principles of Oncology: Prevention to Survivorship

The American; -; 2018; Pages: -; Tome: -;

2. Zalecenia postępowania diagnostyczno-terapeutycznego w nowotworach złośliwych,

Maciej Krzakowski; Via Medica;; 2013; Pages: ; Tome: ;

3. Cancer Society's Oncology in Practice: Clinical Management

The American; -; 2018; Pages: -; Tome: -;

4. www.nccn.org

NCCN Guidelines; ;; 0; Pages: ; Tome: ;

5. Onkologia.Podręcznik dla studentów i lekarzy

Radosław Kordek; Via Medica;; 2007; Pages: ; Tome: ;

COMPLIMENTARY LITERATURE:

1. Cancer - Principles and Praktice of Oncolog

Wolters kluver Health;; Vincent de Vita;; 2023; Pages: ; Tome: ;



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Detailed description of ECTS credits awarded - part B

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Oncology

Oncology

1. Contact hours with the academic teacher:

- participation in: Lecture	10 h
- participation in: Seminar	10 h
- participation in: Classes	45 h
- consultation	5 h
Total:	70 h

Independent work of a student:

- preparation for exercise	16.00 h
- preparation for the exam	15.00 h
Total:	31.00 h

contact hours + independent work of a student Total: 101.00 h

1 ECTS credit = 25-30 h of an average student's work, number of ECTS

ECTS Points = 101.00 h : 25 h/ECTS = 4.00 ECTS

Average: 4.00 ECTS

- including the number of ECTS credits for contact hours with the direct participation of an academic teacher - 2.77 ECTS pts

- including the number of ECTS credits for hours of independent work of a student - 1.23 ECTS pts