



---

Course title: ONCOLOGY

ECTS credit allocation (and other scores): 4

Semester: spring

Level of study: ISCED-7- long-cycle programmes (EQF-7)

Branch of science: Medical and health sciences

Language: English

Number of hours per semester: 65h

Course coordinator/ Department and e-mail: [sergiusz.nawrocki@uwm.edu.pl](mailto:sergiusz.nawrocki@uwm.edu.pl) /[irena.rzatkiewicz@uwm.edu.pl](mailto:irena.rzatkiewicz@uwm.edu.pl)

---

Type of classes: classes and lectures

#### Substantive content

**CLASSES:** Development of a patient's medical history of cancer: a) physical examination and symptoms, with particular attention to the interview focused on the diagnosis of cancer, environmental and genetic predisposition, b) planning diagnostic tests, c) the interpretation of the results of laboratory tests, imaging, functional, histopathology, d) putting the differential diagnosis and the final e) tumor staging, f) plan appropriate to the stage of cancer cancer treatment in the proper sequence (surgery, radiotherapy and systemic), g) plan diagnosis, treatment and control of potential side effects of treatment oncology, h) plan assessing the results of treatment, i) recognition of symptoms associated with cancer and suggest appropriate treatment - eg. cancer cachexia, pain, j) identification of nutritional needs and plan a possible dietary treatment, including paraenteral, k) recognize the psychological and social needs , propose remedial action, l) to propose a possible genetic counseling, m) the planning of control tests

**LECTURES:** Biology of cancer: oncogenesis, abnormal cell division, malignant transformation, oncogenes, proto-oncogenes, antionkogeny, the characteristics of cancer cells, apoptosis. 2 Basics of modern diagnosis and treatment of cancer: what is the cure in oncology, 5-year survival, mortality, primary and secondary prevention of cancer, screening, methods for diagnosing cancer, histopathological examination, tumor markers, tumor staging, Gleason grade, TNM system , degrees of clinical stage, treatment strategies for cancer, radical treatment, palliative treatment, combination therapy, prognostic factors and predictors. 3 radiotherapy of cancer radiotherapy radical palliative radiotherapy, radiation types, interaction of ionizing radiation with cells cancer therapeutic index, dose-fractionation, in emergency situations treated with radiation, radiotherapy, stereotactic radiotherapy intraoperative brachytherapy, complications acute and late radiotherapy. 4 Systemic treatment of cancer: chemotherapy classic, types of cytostatics, mechanism of action, route of administration, regimens, chemotherapy, radical and palliative, acute and late complications of chemotherapy, hormonal therapy, targeted therapies, immunotherapy. 5 Patient after cancer treatment: control after treatment, physical problems, social and mental health, disability, rehabilitation, chronic fatigue, problems with nutrition, sexual problems, pregnancy after cancer treatment, quality of life. SEMINAR 1.Gastrointestinal tract neoplasms. 2.Urogenital neoplasms. 3. Lung cancer and other cancers of the chest. 4. Breast cancer. 5. Genital tract neoplasms. 6. The head and neck neoplasms. 7. Sarcomas and skin cancers. 8. The central nervous system neoplasms. Seminars 1-8: epidemiology and etiology of various cancers, subjective and objective symptoms, environmental and genetic predisposition, screening, diagnostic imaging and functional, histopathological diagnosis, methods of treatment, results of treatment, observation after treatment, palliative treatment. 9. Radiotherapy: types of teletherapy and brachytherapy, the designation of irradiation, identifying critical areas, treatment planning, dose fractionation methods. 10. Cancer pain: the scale of the problem, the cause of pain, types of pain, the pain receptors, neuropathic pain, diagnosis, methods of pain assessment, principles of treatment of cancer pain, the WHO ladder, evaluation of treatment effect, breakthrough pain - diagnosis, treatment, drug-free treatment.



Learning purpose: Students gain knowledge of the symptomatology, diagnosis and treatment of malignant tumors with major emphasis on the role of combination therapy. In addition meets the principles of diagnosis and treatment of cancer pain and palliative care principles in oncology

---

On completion of the study programme the graduate will gain:

Knowledge: E.W.23 - Knows the environmental and epidemiological conditions of the most common human cancers. E.W24 - Knows the basics of early cancer detection and principles of screening in oncology. E.W25 - Knows the principles of combined therapies in oncology, diagnostic and therapeutic algorithms in the most common human cancers. E.W.26 - Knows the possibilities of modern cancer therapy (including multimodal therapy), the perspectives of cell and gene therapies and their undesirable effects

Skills: E.U16 - Planning diagnostic, therapeutic and preventive patient with cancer

Social Competencies: - K.1. - Able to establish and maintain contact with the patient K.2. - Directs the good of the patient, putting them in first place K.3. - Maintain the confidentiality of all medical and patient rights

---

Basic literature: Wolters kluver Health, Cancer - Principles and Practice of Oncology , wyd. Vincent de Vita, 2011

Guidelines from NCCN (National Comprehensive Cancer Network) - <https://www.nccn.org/professionals/physician>.

Access is free of charge after registration to the NCCN network.

Supplementary literature:

---

The allocated number of ECTS points consists of: 1 ECTS point = 25-30 h of the average student's work, number of ECTS points = 100 h : 25 h/ECTS = 4,00 ECTS

Contact hours with an academic teacher: 70h

Student's independent work: 30h