

Course: Oncology

Course Coordinator: Associate Professor Ingrid Belac-Lovasić c, PhD

Department: Department of Oncology and radiotherapy

Study program: Integrated Undergraduate and Graduate University Study of Dental Medicine

Study year: 3

Academic year 2022/23

SYLLABUS

Course description (a brief description of the course, general instructions, where and in what form the lessons are organized, necessary equipment, instructions for attendance and preparation for classes, student obligations, etc.):

The Oncology course is a mandatory course in the third year of Dental Medicine studies, which consists of 10 hours of exercises and 5 hours of seminars, a total of 15 hours.

The seminars take place in the lecture hall of the KBC Clinic in Rijeka, and the exercises are held at the Radiotherapy and Oncology Clinic of the Clinical Hospital Center in Rijeka. The course is conducted as part of the Clinical Medicine II course.

The aim of the course is to familiarize medical students with the basics of the origin of malignant diseases, the main risk factors for their occurrence, their treatment as well as the therapy of side effects of the treatment itself. Also, the aim of the course is to acquire knowledge about care for the terminally ill and the basics of palliative medicine. To familiarize students with preventive treatment measures.

Course content:

Students are introduced to the biology of tumor growth and the risk factors that can lead to its occurrence malignant diseases. The most common types of tumors will be discussed and the basics of each of them will be stated treatment. In doing so, we will refer to treatment with cytostatic therapy, radiotherapy (radical and palliative), biological therapy and hormonal therapy. We will also refer to the treatment of side effects of oncology therapy, both chemotherapy and radiotherapy. We will introduce students to palliative care and the procedures undertaken for this purpose. Prevention programs in the Republic of Croatia will also be discussed.

Conducting classes:

Teaching is conducted in the form of seminars and exercises. With the final exam, the student acquires 1.5 ECTS points.

Assigned reading:

Ralston SH, Penman ID, Strachan MWJ, Hobson RP. Davidson's Principles and Practice of Medicine. 23rd ed. Edinburgh, Elsevier, 2018. – selected chapters

Optional	I/additional reading:			

COURSE TEACHING PLAN:

The list of seminars (with topics and descriptions):

S1. Introductory seminar: definition and scope of oncology science Learning outcomes:

Defining the basics of the scope of oncology science as well as the methods of evaluation of oncology patients and the basics of treatment in oncology.

S2. Epidemiology and prevention of malignant tumors

Learning outcomes:

To explain the molecular-genetic basis of cancer, which is increasingly becoming the basis for the specific treatment of malignant tumors, cell division, since chemotherapy is based on the action of cytostatics on certain phases of the cell cycle.

S3. Diagnosis and treatment of tumors by region: malignancies of the breast, respiratory system and digestive system

Learning outcomes:

To define the ways of immunological recognition of malignant cells, taking into account the knowledge of how it is the immune system is one of the important factors in the destruction of malignant cells. Tell about the causes metastasizing of malignant tumors as well as ways of creating their own blood vessel system by malignant cells.

S4. Malignancies of the oral cavity and salivary glands

Learning outcomes:

Introduce certain types of malignant tumors of the oral cavity and salivary glands. Analyze risk factors for the occurrence of certain malignant diseases. Describe and interpret basic diagnostic methods in oncology.

S5. Malignancies of the larynx, malignancies of the nasal cavity and paranasal sinuses, malignancies of the ear and eye, malignancies of the central nervous system

Learning outcomes:

Explain the methods of surgical treatment of malignant tumors of the larynx, nasal cavity, paranasal sinuses, ear, eye and CNS. Explain the basic principles of oncological treatment: the basics of cystostatic therapy, hormonal therapy, biotherapy and thermophototherapy.

The list of practicals with descriptions:

P1. Introductory exercise: - access to an oncology patient, history and status, devices for radiation and brachytherapy, application of cytostatics

Learning outcomes:

Comment on the approach to the oncology patient, take the anamnesis and status of such patients.

P2. Breast carcinomas

Learning outcomes:

Comment on patients with sparing and radical surgery. Perform history taking and status. Analyze side effects of radiation and their rehabilitation, application of cytostatics, premedication, side effects of cytostatic therapy

P3. Carcinomas of the uterus

Learning outcomes:

Analyze tumors of the cervix, uterus, pubis and ovaries. Perform history taking and status. Brachytherapy simulation of radioactive cesium application. Comment on the side effects of radiation and their rehabilitation.

P4 Carcinomas of the lungs, Carcinomas of the digestive tract and urinary bladder Learning outcomes:

Analyze tumors of the lung, esophagus, stomach, pancreas and colorectum. Perform history taking and status. Plan radiation for esophageal and rectal cancer. Comment on side effects of radiation and their rehabilitation, application of biological therapy and anus praeter.

P5. Carcinomas of the oral cavity and salivary glands Learning outcomes:

To analyze the condition of patients with tumors of the oral cavity and salivary glands. Perform history taking and status. Plan concomitant chemoradiotherapy for the mentioned tumors. Separate side effects and remediation of side effects of radiation and cytostatic therapy.

P6. Carcinomas of the larynx

Learning outcomes:

To analyze a patient with tumors of the mouth and larynx. Perform history taking and status. Plan concomitant chemoradiotherapy for the mentioned tumors. Comment on the side effects and remediation of the side effects of radiation and cytostatic therapy.

P7. Carcinomas of the pharynx

Learning outcomes:

To analyze a patient with tumors of the pharynx. Take history and status, plan concomitant chemoradiotherapy for the mentioned tumors. Comment on the side effects and remediation of the side effects of radiation and cytostatic therapy.

P8. Malignancies of the nasal cavity and paranasal sinuses, Malignancies of the eye and ear Learning outcomes:

Analyze patients with malignant tumors of the nasal cavity and paranasal sinuses. Perform history taking and status. Plan radiotherapy of eye and ear malignancies, brain edema therapy. Cytostatic therapy.

P9. Central nervous system malignancies. Carcinomas of the skin.

Learning outcomes:

Analyze patients with basal cell and squamous cell carcinomas of the skin. Perform history taking and status. To analyze the radiotherapy of the same, treatment of radiodermatitis. Analyze malignant melanomas. Distinguish treatment with special reference to biological therapy.

P10. Therapy planning in an oncology patient

Analyze the methods of application of cytostatics, their side effects and their rehabilitation, treatment of febrile neutropenia. Comment on biological therapy, its application method, side effects and remediation thereof. Students independently prepare and publicly present a seminar on a given topic dealing with ethical aspects of their future profession.

Students' obligations:

Students are required to regularly attend exercises and actively participate in all forms of teaching, and during all forms of teaching they must be ready to answer questions. In order for classes to take place in this way, students must read in advance what is expected of them and prepare for a particular form of class.

A student can miss 30% of classes solely for health reasons, which is justified by a doctor's excuse. Attendance at all classes is mandatory. Compensation for exercises is possible with prior agreement with the leader. If a student, excused or unjustified, misses more than 30% of classes, he cannot continue following the course and loses the opportunity to take the final exam. With this, he collected 0 ECTS points and was graded F.

Exam

ECTS credit grading system:

Student assessment is carried out according to the current Regulations on Studies of the University of Rijeka.

Students are graded using the ECTS (A-F) and numerical system (1-5). Grading in the ECTS system is carried out by absolute distribution.

During classes, a student can collect a maximum of 50 grade points, a maximum of 50 grade points on the final exam.

During the class, the activity will be evaluated in the exercises (maximum 20 evaluation points) and by the preparation and presentation of the seminar (maximum 30 evaluation points).

Final exam - written exam + oral exam. The written exam in the form of a test consisting of 50 questions carries a maximum of 50% of the final grade, and the result achieved in the written exam qualifies the student to take the oral exam.

Final grade:

90-100% 5 A Excellent

75-89.9% 4 B Very good

60-74.9% 3 C Good

50-59.9% 2 D Sufficient

0-49.9% 1 F Insufficient

Other important information regarding to the course:

Teaching content and all information related to the course as well as exam dates can be found on the ecourse on the Merlin platform.

COURSE SCHEDULE (for academic year 2022/23)

Date	Lectures (time and place)	Seminars (time and place)	Practicals (time and place)	Instructor
24.01.2023.		S1-S5 (13.15 – 18.15)		Associate Professor Ingrid Belac-Lovasić MD, PhD
25.01.2023.			P1-P5 (10.30 – 15.00)	Primarius MD PhD Goran Golčić MD Ana Marija Bukovica- Petrc
26.01.2023.			P6-P10 (12.30 - 16.45)	Primarius MD PhD Goran Golčić MD Ana Marija Bukovica- Petrc

List of lectures and seminars:

	SEMINARS (Topics)	Teaching hours	Location/Lecture room
L1	Introductory seminar: definition and scope of oncology science	1	Lecture Hall at
	Science		Infectious Diseases
L2	Epidemiology and prevention of malignant tumors	1	Lecture Hall at
			Infectious Diseases
L3	Diagnosis and treatment of tumors by region:	1	Lecture Hall at
	malignancies of the breast, respiratory system and		Infectious Diseases
	digestive system		
L4	Malignancies of the oral cavity and salivary glands	1	Lecture Hall at
			Infectious Diseases
L5	Malignancies of the larynx, malignancies of the nasal	1	Lecture Hall at
	cavity and paranasal sinuses, malignancies of the ear and		Infectious Diseases
	eye, malignancies of the central nervous system		
	TOTAL TEACHING HOURS	5	

PRACTICALS (Topics)	Teaching hours	Location/Lecture room
Introductory exercise: - access to an oncology patient, history and status, devices for radiation and brachytherapy, application of cytostatics	1	Radiotherapy and Oncology Clinic
Breast carcinomas	1	Radiotherapy and Oncology Clinic
Carcinomas of the uterus	1	Radiotherapy and Oncology Clinic
Carcinomas of the lungs, Carcinomas of the digestive tract and urinary bladder	1	Radiotherapy and Oncology Clinic
Carcinomas of the oral cavity and salivary glands	1	Radiotherapy and Oncology Clinic
Carcinomas of the larynx	1	Radiotherapy and Oncology Clinic
Carcinomas of the pharynx	1	Radiotherapy and Oncology Clinic
Malignancies of the nasal cavity and paranasal sinuses, Malignancies of the eye and ear	1	Radiotherapy and Oncology Clinic
Central nervous system malignancies. Carcinomas of the skin.	1	Radiotherapy and Oncology Clinic
Therapy planning in an oncology patient	1	Radiotherapy and Oncology Clinic
TOTAL TEACHING HOURS	10	

	FINAL EXAM DATES	
1.	27.01.2022.	
2.	21.02.2022.	
3.	20.06.2022.	