



CD 8.5.1 CURRICULUM DISCIPLINĂ PENTRU
STUDII UNIVERSITARE

RED: 09
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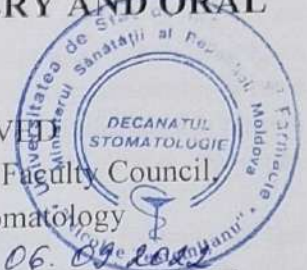
FACULTY OF STOMATOLOGY
STUDY PROGRAM 0911.1 STOMATOLOGY
DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY AND ORAL
IMPLANTOLOGY „ARSENIE GUȚAN”

APPROVED
at the meeting of the Committee for Quality
Assurance and Curriculum Evaluation,
Faculty of Stomatology
Minutes no. 6 from 23.06.2022

Chairwoman of the Committee, PhD MD,
associate professor
Stepco Elena [Signature]

APPROVED
at the meeting of the Faculty Council,
Faculty of Stomatology
Minutes no. 1 from 06.09.2022

Dean of the Faculty, PhD MD,
associate professor
Solomon Oleg [Signature]



APPROVED
at the Meeting of the Department of
Oral and Maxillofacial Surgery and
Oral Implantology *Asenie Guțan*
Minutes no. 8 of 16.06.2022

Head of the Department habilitate doctor,
associate professor
Chele Nicolae [Signature]

CURRICULUM

DISCIPLINE: ONCOLOGY IN OMF SURGERY

Integrated studies

Course type: **Mandatory discipline**

Chişinău, 2022



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I. PRELIMINARIES

- **General presentation of the discipline: the place and role of the discipline in the formation of the specific competences of the specialty training programme**

„Oncology in OMF surgery” is an indispensable compartment for both oral and maxillo-facial surgery, as well as for other divisions of modern dentistry. Students’ training in oncology takes place via familiarizing them with the characteristics of” head and neck” department at the Oncology Institute, where they are involved in the study process of clinical manifestations of cancer in cranio-maxillofacial territory and at the department of oral and maxillofacial surgery at the emergency hospital, where they get acquainted with benign tumors in the above mentioned territory.

The increased number of patients in dental practice in relation to other specialties, as well as the changes in the last decades in the national dispensarization system, entrust them with an important role in the early diagnosis of oncological pathology, as well as manifestations in the maxillo-facial region and in other territories.

Studying the physical examination of patients, as well as the clinical and paraclinical examination methods in this compartment, develops in the future clinician the clinical reasoning and judgment in order to reach the correct differential diagnosis in the case of a tumor with a clinical symptomatology or a radiological manifestation. At the same time, special attention is paid on the educational work with patients in order to inform the population about the role of favoring and predisposing factors in the emergence and development of oncological morbidity.

Mission of the curriculum (purpose) in professional training

Oncology in OMF surgery has the purpose to develop oncologic vigilance and clinical decision of the future clinician, as well as the accumulation of knowledge in the ability to interpret clinical and paraclinical data in order to establish a presumptive diagnosis. Another goal is the ability to collect biological samples to establish a morphologically verified diagnosis. At the same time, studying the factors favoring the occurrence of cancer aims at developing the future specialist's ability to act prophylactically in order to reduce morbidity and improve the quality of patient’s life.

- **Discipline teaching languages:** Romanian, russian and english.
- **Beneficiaries:** students of the 5-th year, faculty of Dentistry.

II. ADMINISTRATION OF THE DISCIPLINE

Code of discipline		S.09.O.111	
Name of the discipline		Oncology in OMF surgery	
Responsible for discipline		Suharschi Ilie, PhD, MD, assoc.prof. Nicolae Chele, doctor habilitate, assoc.prof.	
Year	V	Semester	IX
Total number of hours, inclusively:			120
Course	26	Practical work	26
Seminars	26	Individual work	42
Evaluation form	E	Number of credits	4



III. TRAINING OBJECTIVES OF THE DISCIPLINE

- *At the level of knowledge and understanding:*

- ✓ to know the role of oncology as science in social life and the importance of dentist and patient education;
- ✓ to define the meaning of oncologic vigilance, its objectives and tasks;
- ✓ to know the theory of cancerogenesis, mutational theory;
- ✓ to know the classification of tumors in the OMF region;
- ✓ to understand how to communicate with patients and establish their anamnesis of suspected tumor disease;
- ✓ to know the characteristics and the key steps involved in the clinical and paraclinical examination of patients with suspicion for tumoral disease;
- ✓ to know the early stages of malignant tumors and OMF pre-cancerous lesions;
- ✓ to know the symptomatology, diagnosis, treatment and prophylaxis of skin cancer of the face, malignant melanoma, cancer of the: lips, gingiva, hard and soft palate, floor of the mouth, tongue, sarcoma, malignant tumors of salivary glands;
- ✓ to know surgical methods of treatment, radiotherapy, chemotherapy for malignant tumors in the OMF region;
- ✓ to know the symptomatology, diagnosis, treatment and prophylaxis of odontogenic and non-odontogenic tumors of the jaws, osteogenic and non-osteogenic tumors of the jaws, maxillary cysts, congenital cysts and fistulas, benign tumors of the salivary glands;
- ✓ to know the characteristics of dental treatment of the patients receiving chemotherapy and/or radiotherapy;
- ✓ to know the competence of a dental practitioner for diagnostics and treatment of a tumor disease.

- *At the level of application:*

- ✓ to perform in a proper way a full clinical examination of the patient in a structured way, so that the oncologic vigilance is respected;
- ✓ to identify the proper paraclinical method of investigation of the patient with suspicion for a tumoral disease;
- ✓ to be able to establish a presumptive diagnosis of a patient with suspicion for a tumoral disease;
- ✓ to be able to highlight important data to establish the diagnosis;
- ✓ to be able to take tissue samples (biopsy) from the oral cavity and to realize it competences in this process;
- ✓ to be able to explain patient the role of the favoring and predisposing factors in the prophylaxis of cancerogenesis;

- *At the level of integration:*

- ✓ to understand the purpose and principles of Oncology in the OMF region.
- ✓ to understand the relationship of oral and maxillofacial oncology with other medical specialties.
- ✓ to be able to assess the zone and role of OMF Oncology in the clinical preparation of the student-physician;
- ✓ to be competent to use the knowledge and methodology of OMF Oncology in the ability to explain the nature of some physiological or pathological processes;



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IV. CONDITIONS AND PRIOR REQUIREMENTS

Oncology in OMF surgery presents a substrate for the integration and implementation of fundamental knowledge (anatomy, topographic anatomy, histology, human physiology, physiopathology, etc.) as well as other divisions of dentistry (dental propaedeutic, therapeutic and orthopedic dentistry, etc.) in clinical practice. Besides studying etiology, pathogenesis, clinical manifestations, treatment and prophylaxis of oncological morbidity, the future dental practitioner acquires practical skills in patient investigation and interpretation of the obtained results, in order to determine early manifestations of cancer in the OMF region.

V. SUBJECTS AND DISTRIBUTION OF HOURS

Nr. o/o	SUBJECT	Number of hours		
		Lectures	Seminars/ Practical lectures	Individual
1.	Oncologic vigilance. Early diagnostic methods of malignant tumors and their metastases in the oro-maxillo-facial area.	3	3/3	6
2.	The onset forms of malignant tumors in the oro-maxillo-facial area. The cancerogenesis theory. Consultation of patients suffering from premalignant lesions of oral cavity and maxillo-facial region.	2	2/2	4
3.	Cancer of facial skin. Malignant melanoma. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2/2	4
4.	Lip cancer, gingival cancer, hard and soft palate cancer, floor of the mouth cancer, tongue cancer. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2/2	4
5.	Malignant tumors of the maxilla and mandible. Sarcoma. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2/2	4
6.	Malignant tumors of salivary glands. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2/2	4
7.	Surgical treatment, radiotherapy and chemotherapy of patients with malignant tumors in oro-maxillo-facial region.	2	2/2	4
8.	Odontogenic tumors of the jaws. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2/2	4
9.	Non-odontogenic tumors of the jaws. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2/2	4
10.	Osteogenic and non-osteogenic tumors of the jaws. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2/2	4
11.	Cysts of the jaws. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2/2	4
12.	Congenital cysts and fistulas in OMF region. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	1	1 /2	3
13.	Soft tissue tumors in the OMF region. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	1	1 /2	3
14.	Benign tumors of salivary glands. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	1	1 /2	3
15.	The specifics of dental treatment of oncological patients. Osteoradionecrosis. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	1	1 /2	3
Total		26	26/26	42



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VI. REFERENCE OBJECTIVES AND CONTENT UNITS

Objectives	Content units
<p>Oncologic vigilance. Early diagnostic methods of malignant tumors and their metastases in the oro-maxillo-facial area. The onset forms of malignant tumors in the oro-maxillo-facial area. The cancerogenesis theory. Consultation of patients suffering from premalignant lesions of oral cavity and maxillo-facial territory.</p>	
<ul style="list-style-type: none"> ✓ to know the theory of cancerogenesis; ✓ to define the meaning of oncologic vigilance; ✓ to know the early stages of malignant tumors in the OMF area; ✓ to know the symptomatology of precancerous lesions in oro-maxillo-facial area; ✓ to know the prophylactic measures in prevention of oncologic diseases; ✓ to know the clinical manifestations for malignant tumors in oro-maxillo-facial area; ✓ to know the anatomo-topographic characteristics of oro-maxillo-facial area, lymphatic circulation; ✓ to know the clinical appearance of normal tissues; ✓ to know the ways of spreading in tumor diseases. 	<p>The role of gene mutations in the appearance of cellular atypism. The role of dental practitioner in early diagnostics of oncologic morbidity. Clinical manifestations in early stages of malignant tumors in the OMF area. Clinical manifestations on precancerous lesions in OMF region.</p> <p>Oral mucosa and skin pathology. Multislice computed tomography data, cone beam computed tomography, nuclear magnetic resonance. Ultrasonography data. Topographic anatomy of the jaws. Lymphatic system of the head and neck. Vascularization and innervation of the jaws.</p>
<p>Skin cancer of the face, malignant melanoma, lip cancer, gingival cancer; hard and soft palate cancer, floor of the mouth cancer, tongue cancer, maxilla and mandible cancer, sarcoma, malignant tumors of salivary glands. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.</p>	
<ul style="list-style-type: none"> ✓ to know the etiology and pathogenesis of skin cancer, malignant melanoma, lip cancer, gingival cancer; hard and soft palate cancer, floor of the mouth cancer, tongue cancer, maxilla and mandible cancer, sarcoma, malignant tumors of salivary glands; ✓ to know clinical manifestations, diagnosis and treatment of skin cancer, malignant melanoma, lip cancer, gingival cancer; hard and soft palate cancer, floor of the mouth cancer, tongue cancer, maxilla and mandible cancer, sarcoma, malignant tumors of salivary glands; ✓ to know the prophylactic measures of skin cancer, malignant melanoma, lip cancer, gingival cancer; hard and soft palate cancer, floor of the mouth cancer, tongue cancer, maxilla and mandible cancer, sarcoma, malignant tumors of salivary glands. 	<p>Histologic structure of the skin. Favoring and predisposing factors in skin cancer and malignant melanoma. Histologic structure of oral mucosa, salivary glands and facial bones. Favoring and predisposing factors in the development of the cancer of the lips, gingiva, hard and soft palate, tongue, maxilla and mandible, salivary glands. Basic principles in the prophylaxis of oncologic pathology in the everyday practice of a dentist.</p>



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Odontogenic and non-odontogenic tumors of the jaws. Osteogenic and non-osteogenic tumors of the jaws. Maxillary cysts. Congenital cysts and fistulas. Benign tumors of soft tissues and salivary glands.

- ✓ to know the etiology and pathogenesis for odontogenic and non-odontogenic tumors of the jaws, osteogenic and non-osteogenic tumors of the jaws, maxillary cysts, congenital cysts and fistulas, benign tumors of soft tissues and salivary glands;
- ✓ to know clinical manifestations, diagnosis and treatment for odontogenic and non-odontogenic tumors of the jaws, osteogenic and non-osteogenic tumors of the jaws, maxillary cysts, congenital cysts and fistulas, benign tumors of soft tissues and salivary glands.

Embryogenesis, pathogenesis for benign tumors in oro-maxillo-facial territory.
Histology of maxillary cysts.
Morphological identification to determine the tactic of treatment.
Definition of recurrence in dento-alveolar and maxillo-facial surgery.

Surgical treatment, radiotherapy and chemotherapy of patients with malignant tumors in oro-maxillo-facial area.

- ✓ to know the characteristics of a complex treatment for patients with malignant tumors;
- ✓ to know the types of surgery in the treatment of patients with tumors in OMF area;
- ✓ to know the actions of chemotherapy and radiotherapy on the macro organism and treatment effect of the tumor.

Radical surgical treatment.
Palliative surgical treatment.
Cytostatic medication.
Radiation doses and irradiation types.

The specifics of dental treatment of oncological patients.. Osteoradionecrosis.

- ✓ to know the effects of chemotherapy on the patient;
- ✓ to know the effects of radiotherapy on the patient;
- ✓ to know the potential dangerous dose for osteoradionecrosis;
- ✓ to know the local and general treatment in osteoradionecrosis;
- ✓ to know the role of radiotherapist in the prophylaxis of osteoradionecrosis.

Chemotherapy drugs used in the treatment of malignant tumors.
Types of radiotherapy. Rehabilitation period after radiotherapy.
Hyperbaric oxygen therapy.
Radiation therapy dose.
Indications and contraindications for dental care in patients with radiotherapy anamnesis.



VII. PROFESSIONAL SKILLS (SPECIFIC (SS) AND TRANSVERSAL (TS)). STUDY FINALS

Professional skills (specific) (SS)

SS1: Knowledge of theoretical anatomy in oro-maxillo-facial territory, of oncology in OMF surgery, general principles in establishing early diagnosis, analysis and interpretation of clinical and paraclinical data; knowledge of clinical manifestations of oncologic morbidity, means of prophylaxis in the dental practitioner's activity, knowledge of the principles in oncologic vigilance.

SS2: Knowledge of clinical and paraclinical examination of patients with oncologic diseases in oro-maxillo-facial region; evaluation of paraclinical examination data, evaluation and description of diagnostic methods.

SS3: Completing the medical records of the patients, conducting the clinical examination and developing indications to the type of paraclinical examination as appropriate with their reasoning. Determination of options for establishing the diagnosis and treatment plan. Description of the stages of taking tissues for morphological examination.

SS4: Analysis of laboratory investigations data and their description. Analysis of radiographs, evaluation and description of anatomical features based on cone beam computed tomography and identification of tumor diseases.

SS5: Definition of oncologic vigilance and its application. Evaluation of differential diagnosis methods of tumor pathology, oral mucosa lesions.

SS6: Demonstration and application of the accumulated knowledge in the clinical and paraclinical evaluation of patients. Selection and argumentation in diagnostic and treatment techniques of patients somatically compromised, because of the complex therapy for oncologic pathology.

Transversal skills (TS)

TS1: Applying professional standards of assessment, acting according to professional ethics, as well as the current legislation provides. Promoting logical reasoning, practical applicability, assessment and self-assessment in making decisions..

TS2: Performing activities and considering teamwork within the dental office/OMF department. Promoting the spirit of initiative, dialogue, cooperation, positive attitude and respect for others, empathy, altruism and continuous improvement of our own activity.

TS3: Systematic evaluation of the skills, role and personal expectations, applying self-assessments to learning processes, to provide quality services and other competencies in the field of research and communication, effective use of linguistic adaptation, adaptation to health policy requirements, personal and professional development.

Study finals:

At the end of the discipline studies, the student will be capable to:

- know the basic principles of diagnosis and complex treatment of patients with benign and malignant tumors in the OMF area, functional structure and organization of medical assistance in the head and neck department of the IMSP Oncologic Institute;
- know the role and functions of the dentist in the early diagnosis of tumor diseases, the particularities of the dental treatment of patients undergoing radiotherapy;
- promote healthy lifestyle and health education through speeches, papers, presentations, articles in specialized journals, etc.



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VIII. THE STUDENT'S INDIVIDUAL WORK

Nr.	Information sources	Implementation Strategies	Evaluation criteria	Time limits
1.	Work with information sources	<p>Read the lecture or the material in the manual to the topic carefully.</p> <p>Read questions on the subject, which require a reflection on the subject.</p> <p>To get acquainted with the list of additional information sources on the topic. Select the source of additional information for that topic.</p> <p>Reading the text entirely, carefully and writing the essential content.</p> <p>Formulation of generalizations and conclusions regarding the importance of the topic / subject.</p>	<p>Ability to extract the essentials;</p> <p>interpretative skills;</p> <p>Ability to analyze and communicate the accumulated material</p>	During the semester
2.	To solve situational problems	<p>Solving case problems, arguing the conclusions at the end of each practical work. Verification of the finalities and appreciation of their achievement. Selection of additional information, using electronic addresses and additional bibliography</p>	<p>The quality of solving clinical case scenarios, the ability to formulate and interpret clinical and paraclinical data.</p> <p>Ability to analyze selected information from national and international professional websites.</p>	During the semester
3.	<p>Evaluation of perception (basic knowledge) in clinical and paraclinical examination of patients. Evaluation of asepsis and antisepsis methods in the dental office / OMF surgery department.</p> <p>Each student will fill in the patient's medical record, systematize the stages of the clinical examination and collection of the anamnesis. Establish indications for paraclinical investigations arguing their need.</p>			
3.1	Recording of data and patients anamnesis	Working with the medical record and systematization of stages of anamnesis collection and clinical examination	Assess the correctness and succession of the analysis	During the semester
3.2	Suggest indications for a radiographic investigation.	The student should study the particularities of the radiographic examination and argue for the need to indicate each type of radiographic exam.	Assess the accuracy of the information described by the student.	During the semester
3.5	Preparing the project.	Students will prepare information on the selected topic from the thematic plan with schematic and graphic presentation in Power Point.	Evaluating the quality of the selected material, the design of the project and the ability to reproduce the information.	During the semester



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IX. METHODOLOGICAL SUGGESTIONS FOR TEACHING-LEARNING-EVALUATION

✓ Teaching and learning methods used

In oncology of OMF surgery different *teaching* methods and procedures are used, oriented towards the efficient acquisition and achievement of the objectives of the didactic process. The course provides lectures, seminars, practical works and individual work.

Courses are held in the IX-th semester by the course holder. The following forms of training are used in the practical work: frontal activity, individual activity, brainstorming sessions, group discussions, case simulations in community pharmacies, case study.

As a teaching support, manuals over the specialty are available in the university library, methodological recommendations of the department's staff, tables, schemes, informational sources in electronic format, national and international professional websites, etc.

Students receive individual assignments that are presented for group discussions, which subsequently are assessed by the quality of individual work and practical skills. In order to assimilate the didactic material and teambuilding skills during the semester, students perform a mini-research in the domain, the results of which are presented in the seminars, also practical works organized in the last month of the semester.

The following *learning* methods are recommended: *acquiring the theoretical material* according to the lecture and book; *observation* - identifying the characteristic features of doctor-patient communication; *analysis* – when making use of clinical and paraclinical examination methods of patients, as well as professional attitude for oncologic vigilance; *comparison* – comparison by analysis of the methods of collecting the anamnesis, of paraclinical examination methods according to their advantages and disadvantages; *elaboration of the algorithm* - selection of mandatory elements and elaboration of the dental treatment algorithm of the patient undergoing oncological polytherapy; *modeling* - identifying and selecting the elements needed to recreate situations when consulting patients, formulating conclusions, reasoning, and making the final decision.

✓ Applied didactic strategies / technologies (*discipline specifics*)

Individual, brainstorming sessions, group discussions, clinical case analysis, teambuilding, clinical exam simulation, mini-research, comparative analysis.

✓ Evaluation methods (*including an indication of how the final mark is calculated*)

Current: scheduled checks during seminars and practical works, 3 tests in writing and / or as test-control. The student is evaluated for individual work done during the semester; all grades are summarized in one final grade. At the end of the semester, based on the deductions from the tests, the average annual score is made.

Final: The course ends in an exam. The exam has two stages: test-control and interview according to the topics of the exam.

The final grade is calculated on the basis of positive grades (≥ 5) of the annual average, calculated at the end of the discipline study - 50%; from test-control - 20% and oral interview - 30%. The average annual mark and the marks of all final stages of testing (test and oral answer) - are expressed in numbers according to the scoring scale (according to the table) and the final mark obtained is expressed in two decimal digits, which will be written in the report card .



The roundup of the grades at the evaluation steps

Intermediate note grid (annual average, grades from the exam stages)	National scoring system	ECTS Equivalent
1,00-3,00	2	F
3,01-4,99	4	FX
5,00	5	E
5,01-5,50	5,5	
5,51-6,00	6	
6,01-6,50	6,5	D
6,51-7,00	7	
7,01-7,50	7,5	C
7,51-8,00	8	
8,01-8,50	8,5	B
8,51-8,00	9	
9,01-9,50	9,5	A
9,51-10,0	10	

Note: Failure to attend the examination without good reason is recorded as "absent" and is equivalent to 0 (zero). The student is entitled to 2 (two) claims of the unsuccessful exam.

X. RECOMMENDED BIBLIOGRAPHY:

A. Mandatory:

1. Lessons materials.
2. C. Burlibaşa Chirurgie orală și maxilofacială. București 1999 pag. 51-162
3. G. Timoșca C. Burlibaşa Chirurgie buco-maxilo-facială Chișinău 1992 pag. 51-136
4. Ю. И. Бернадский Основы челюстно-лицевой хирургии и хирургической стоматологии. Витебск 1998 стр. 13-70
5. А. А. Тимофев руководство по челюстно лицевой и хирургической стоматологии Том 1 Киев 1997 стр. 63-150.
6. Larry J. Peterson „Contemporary Oral and Maxillofacial Surgery”, fourth edition, 2003, USA.
7. Fragiskos D. Fragiskos „Oral surgery”, Springer-Verlag Berlin Heidelberg, 2007.
8. Karl R. Koerner “Manual of Minor Oral Surgery for the General Dentist”, 2006, US.

B. Additional: А.И. Пачес Опухоли головы и шеи. 2013. Практическая медицина. Россия.