

### CD 8.5.1 CURRICULUM DISCIPLINĂ

RED: 06 DATA: 20.09.2017

Pag. 1/10

# FACULTY OF STOMATOLOGY STUDY PROGRAM 0911.1 STOMATOLOGY DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY AND ORAL IMPLANTOLOGY "ARSENIE GUŢAN"

**APPROVED** 

at the meeting of the Committee for Quality Assurance and Curriculum Evaluation, Faculty of Stomatology

Minutes no. 3 from 16.02.2018

Chairwoman of the Committee. PhD MD. associate professor.

Stepco Elena

**APPROVED** 

at the meeting of the Faculty Council.

Faculty of Stomatology

Minutes no. 6 from 20. 01 2018

Dean of the Faculty. PhD MD,

associate professor

Ciobanu Sergiu

**APPROVED** 

oral Implantology Asenie Gutan Minutes no. 3 of 22 11.2014

Head of the Department PhD MD.

associate professor

Chele Nicolae

# **CURRICULUM**

DISCIPLINE: ONCOLOGY IN ORAL AND MAXILLOFACIAL SURGERY

Integrated studies

Course type: Mandatory discipline



<b>RED:</b>	06		
DATE:	20.09.2017		
Page 2/10			

### 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 him 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 vigilence and clinical decision making of the future clinician as well as the accumulation of knowledge in the ability to interpret clinical and paraclinical data to establish a presumptive diagnosis. Another goal is the ability to collect biologic 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 action prophylactically to reduce morbidity and improve the quality of life of patients.

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

### II. ADMINISTRATION OF THE DISCIPLINE

Code of discipline		S.09.O.112	
Name of the discipline		Oncology in OMF surgery	
Responsible for discipline		Suharschi Ilie, dr. șt. med., conf. univ.	
Year	V	Semester IX	
Total number of hours, inclusively:			150
Course	32	Practical work	56
Seminars	24	Individual work	38
Evaluation form	DC	Number of credits	5



RED:	06
DATE:	20.09.2017
Page 3/10	

### 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 vigilence, its objectives and tasks;
- ✓ to know the theory of cancer evolution;
- ✓ to know the classification of tumors in the OMF territory;
- ✓ to understand how to communicate with patients and establish their anamnesis when suspected of a tumor;
- ✓ 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 nonodontogenic 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 in 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 vigilence 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 for a patient with suspicion of 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 his competences in this process;
- ✓ to be able to explain the patient the purpose of the prophylaxis and the role of the risk factors in cancerogenesis;



RED:	06		
DATE:	20.09.2017		
Page 4/10			

### IV. PRELIMINARY 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 of 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 territory.

### V. SUBJECTS AND DISTRIBUTION OF HOURS

Nr. SUBJECT	1.1		of hou	ire
II , I	Lectur		Prac-	Indi-
0/0	es	nars	tice	vidual
Oncologic vigilence. Early diagnostic methods of malignant tumors and their metastases in the oro-maxillo-facial area.	3	1	3	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 territory.	2	1	3	2
Cancer of facial skin. Malignant melanoma. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2	4	3
Lip cancer, gingival cancer, hard and soft palate cancer, floor of the mouth cancer, tongue cancer. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	1	4	3
5. Malignant tumors of the maxilla and mandible. Sarcoma. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2	4	3
6. Malignant tumors of salivary glands. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2	4	3
Surgical treatment, radiotherapy and chemotherapy of patients with malignant tumors in oro-maxillo-facial territory.	2	1	4	2
8. Odontogenic tumors of the jaws. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2	4	3
9. Non-odontogenic tumors of the jaws. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2	4	3
Osteogenic and non-osteogenic tumors of the jaws. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2	4	3
Cysts of the jaws. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	3	1	3	3
12. Congenital cysts and fistulas in OMF territory. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2	4	2
Soft tissue tumors in OMF territory. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2	4	2
Benign tumors of salivary glands. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	2	4	2
Special features of oral care in cancer patient. Osteoradionecrosis. Classification. Etiology. Pathogenesis. Symptomatology. Diagnostic. Treatment. Prophylaxis.	2	1	3	2
Total	32	24	56	38



RED:	06
DATE:	20.09.2017

Page 5/10

### VI. REFERENCE OBJECTIVES AND CONTENT UNITS

Objectives Content units

Oncologic vigilence. 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. Teoria cancerogenezei. The cancerogenesis theory. Consultation of patients suffering from premalignant lesions of oral cavity and maxillo-facial territory.

- ✓ to know the theory of cancer evolution;
- ✓ to define the meaning of oncologic vigilence;
- ✓ to know the early stages of malignant tumors in the OMF area;
- ✓ to know the symptomatology of pre-cancerous lesions in oro-maxillo-facial territory;
- ✓ to know the prophylactic measures in prevention of oncologic diseases;
- ✓ to know the clinical manifestations for malignant tumors in oro-maxillo-facial territory;
- ✓ to know the anatomo-topographic characteristics of oro-maxillo-facial territory, lymphatic circulation;
- ✓ to know the clinical appearance of normal tissues;
- ✓ to know the ways of spreading in tumoral diseases.

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 OMF territory.

Clinical manifestations on pre-cancerous lesions in OMF.

Oral mucosa and skin pathology.

Multislice computed tomography data, cone beam computer tomography, nuclear magnetic resonance.

Ultrasonography data.

Topographic anatomy of the jaws. Lymphatic system of the head and neck.

Vascularization and innervation of the jaws.

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.

- ✓ 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.

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.



RED: 06
DATE: 20.09.2017

Page 6/10

Objectives Content units

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 nonosteogenic tumors of the jaws, maxillary cysts, congenital cysts and fistulas, benign tumors of soft tissues and salivary glands.
- Embryogenesis, pathogenesis for benign tumors in oromaxillo-facial territory.

Histology of maxillary cysts.

Morphological identification to determine the tactic of treatment.

Definition of recurrence in dento-alveolar and maxillofacial surgery.

# Surgical treatment, radiotherapy and chemotherapy of patients with malignant tumors in oromaxillo-facial territory.

- ✓ 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 territory;
- ✓ to know the actions of chemotherapy and radiotherapy on the macro organism and its treatment effect of the tumor.

Radical surgical treatment.

Palliative surgical treatment.

Cytostatic medication.

Radiation doses and irradiation types.

### Special features of oral care in cancer patient. Osteoradionecrosis.

- ✓ to know the effects of chemotherapy on the patient;
- ✓ to know the effects of radiotherapy on the
- ✓ 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.



RED:	06
DATE:	20.09.2017
Page 7/10	

# 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 oromaxillo-facial territory; evaluation of paraclinical examination data, evaluation and description of diagnostic methods.

**SS3:** Filling the medical records of the patients, making clinical examination and elaboration of indications for the type of paraclinical investigation, as the case may be, with their argumentation. Determining the options for establishing the diagnosis and treatment plan. Description of the steps for prelevation of tissues for morphological identification.

**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 tumor diseases.

**SS5:** Definition of oncologic vigilence and its application. Evaluation of differential diagnosis methods for tumoral pathology, oral mucosa lesions.

**SS6:** Demonstration and application of the accumulated knowledge in the clinical and paraclinical evaluation of patient. 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 decision-making.

**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, and 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 territory, 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.



RED: 06
DATE: 20.09.2017

Page 8/10

# VIII. THE STUDENT'S INDIVIDUAL WORK

Nr.	Information sources	Implementation Strategies	Evaluation criteria	Time limits
1.	Work with information sources	Read the lecture or the material in the manual to the theme carefully.  Read questions on the subject, which require a reflection on the subject.  To get acquainted with the list of additional information sources on the topic. Select the source of additional information for that theme.  Reading the text entirely, carefully and writing the essential content.  Formulation of generalizations and conclusions regarding the importance of the theme / subject.	Ability to extract the essentials; interpretative skills; Ability to analyze and communicate the accumulated material	During the semester
2.	To solve situational problems	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	The quality of solving clinical case scenarios, the ability to formulate and interpret clinical and paraclinical data.  Ability to analyze selected information from national and international professional websites.	During the semester
3.1.	Evaluation of perception (basic knowledge) in clinical a Evaluation of asepsis and antisepsis methods in the der Each student will fill the patient's medical record, system collection of the anamnesis. Establish indications for parace		ntal office / OMF surgery departm natize the stages of the clinical exam	nent. mination and
3.2.	3.2. Suggest indications for a radiographic investigation.  Suggest indications for a 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



	RED:	06
	DATE:	20.09.2017
Page 9/10		

### 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 studies 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 the students perform a mini-research in the domain, the results of which are presented in the seminars and 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 totals 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 totals, the average annual score is made.

Final: The course ends with an exam.

The **final grade** will consist of the average score from three totals, which takes place at the finishing of each compartment (0.5), the final test sample (0.2) and the oral answer sample (0.3). The scores obtained at the evaluation stages will be expressed in numbers according to the scoring scale (according to the table) and the final grade obtained will be expressed in two decimal figures, which will be entered in the report card.



RED:	06
DATE:	20.09.2017

Page 10/10

### The roundup of the grades at the evaluation steps

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

**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. Burlibașa 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: