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1. **PRELIMINARIES**

* ***General prezentation of discipline: place and role of discipline in specific competences formation of prefessional training program/speciality***

Oral medicine represents a clinical discipline at the intersection between Dentistry and General Medicine. It deals with the study of cause, processes and disease evolution, that afects oral mucosa, perioral skin as well as oral manifestations of systemic diseases.

The general objective of this discipline constitutes clinical diagnosis and nonsurgical management of non-teeth pathologies, that afects maxilo-facial region.

The course is structured in such a way, so the student to obtain knowledges necessary to understand diagnosis, pathogenesis, prophylaxis and management of these diseases. In general it includes clasiffication, terminology and definition, epidemiology, ethiology and pathogenesis. Also includes sympthoms, morphology, diagnosis micro/macro, progresses and pronostic, indications for interpretation diagnosis tests.

In the direction of formation the specific competences of prefessional formation, the discipline suggests for the students of Vth year to obtain knowledges reffering to anamnesis colection, clinical examination, positive and differential diagnosis with confirming local and general clinical symptoms; to be familiarize with oral signs of systemic disorders, to apply an adequate treatment plan.

***Mission of curriculum (purpose) in professional formation***

Change over time the treatment methods and the possibilities of diagnosis, put into condition also a modification of curriculum mission in professional mission.

Methods of clinical and paraclinical examination, provided in oral medicine, insist on contribute to abilities development and of student clinical thinking with the purpose to accumulate necessary competences for the determination the effective methods in prophylaxis, diagnosis and patient treatment.

Another purpose is the future doctor formation with opportunities and obligations in setting precocious diagnosis of oral pathologies. This represents a benefic factor for patient and it will be a support for the highest standards of education in dentistry.

Not less important is the interdisciplinary aspect inside the dentisty specialization. So the future doctor should be attentive to pathologies that necessitate a multidisciplinary cooperation; to be able to recognize own limits of professional capacities to refer the patient to other specialist when is necessary.

Other curricular mission in professional formation is also necessity to inoculate for the future dentist the capacity to hold a professional detailed communication with another specialist from the health domain, to have the same responsibility as the internal doctor.

* ***Languages for teaching the discipline*:** romanian, english, russian.
* ***Beneficiaries***: students of Vth year, Faculty of Stomatology.

1. **DISCIPLINE ADMINISTRATION**

|  |  |  |  |
| --- | --- | --- | --- |
| Discipline code | | **S.10.O.121** | |
| Discipline name | | **Oral pathology** | |
| Responsable of discipline | | **PHD, DMD Valentina Nicolaiciuc** | |
| Year | **V** | Semester | **X** |
| Number of total hours, including: | | | **120** |
| Course | **28** | Practical lessons | **49** |
| Seminares | **21** | Individual study | **22** |
| Evaluation form | **Coloquium** | Number of credits | **4** |

1. **formaTION ObJectiveS WITHIN DISCIPLINE**

***At the level of knowing and understanding***

The stage of university instruction will allow the future specialist, at the level of knowing and understanding the:

* to know that in fact in therapeutic dentistry is contoured a special differentiation of specialization. It is distingwished odontology, enodontics, periodontology and oral pathology;
* to know the role and importance of oral medicine in dentistry domain;
* to be able to define the notion of oral medicine and to be familiarize with purpose and its objectives;
* to know the pathologies that necessite a multidisciplinary cooperation and to be able to recognize the limit of professional capacities, addressing tthe patient as much is necessary to other specialists;
* to possess deep knowledge about risk factors in oral pathologies and to be able to inform the patient about the methods of its prevention;
* to understand the molecular processes, etiology, pathogenesis and classification of oral diseases;
* to know the normal varieties of oral tissues and to be able to differentiate them from other pathologies that can affect head and neck regions;
* to know the types, indications and methods of taking microbiologic samples;
* to know the modality of registration the data in medical card of patient;
* to be familiar with particularities and stages of clinical examination of the patient;
* to be able to hold a detailed communication with patient and to collect the anamnesis.
* să fie capabil să ducă o comunicare detailată cu pacientul și să colectezea anamneza.

# *At the level of application:*

* to possess abilities in implimentation and integration the obtained knowledges in dentistry domain with other clinical disciplines;
* to be able to assimilate and impliment in practice the new achievements in oral medicine domain;
* to be able to synthetize diagnosis and differential diagnosis, pronostic the common diseases and disorders of oral mucosa;
* to be able to evaluate (to treat ,to prevent) oro-maxillo-facial manifestations of systemic diseases basing on clinical presentation (radiography, histologyc analyse and others);
* to be able to comunicate at professional level with other specialists from health domain;
* to be competent to select the diagnosis tests (tissular biopsy, microbiologic examination) and to perform right and basing on them to take objective decissions.
* to be able to colect patient data and to evidence those with major importance for setting the diagnosis;
* effective to use the information and modern technology in its profession;
* in daily activity to use the new methods of diagnosis, treatment and prophylaxis of dental diseases.

***At the level of integration:***

* in base of knowing the etiology and pathogenesis to perform the diagnosis, treatment and prophylaxis of oral mucosa pathologies;
* to be competent in selection the diagnosis methods:tests, tissular biopsies, microbiologic probes and to manage them right;
* to be able to interpret the diagnosis results and to take corresponding decisions;
* having the oportunity at the moment, not to avoid the obligation in precocious diagnosis of oral pathologies;
* to possess the clinical picture of local symptoms, systemic symptoms and clinical differentiation to set final diagnosis;
* to be able to interpret the results and in consequence to take measures.
* to respect with strictness the problems of deontology and medical ethics.

**IV. CondiTIONINGS AND PREVIOUS EXIGENTS**

* to know the language of teaching;
* to have knowledges and competences in domain of anatomy, physiology, pathanatomy, microbiology, histology and others;
* to possess digital competences (internet use, documents processing, electronic tables and presentations);
* to possess abilities of communication and team work;
* to possess qualities – tolerance and compassion upon the patient;

**V. TEMATICS AND ORIENTATIVE REPREZENTATION OF DISCIPLINE HOURS**

| **Order Nr.** | **ТHЕМE** | **Number of hours** | | | |
| --- | --- | --- | --- | --- | --- |
| **Lectures** | **Semi-nares** | **Practical lessons** | **Individual study** |
|  | Histological and physiological characters of oral cavity and tongue. Classification of the oral mucosa diseases  Anatomic-physiologic characters and histological characters of oral mucosa epithelium. Primary and secondary elements that occur in oral mucosa diseases . Essential purpose and stages of clinical examination of the patient with oral mucosa lesion. Basic methods of patient examination with oral mucosa lesion. Methods of additional examination in diagnosis the oral pathology. Systematization the pathologic states of oral mucosa according to etiologic and pathogenesis factors. | 2 | 2 | 5 | 1 |
|  | **Traumatic lesions of oral mucosa. Leukoplakia. Clinical picture of oral mucosa. Diagnosis and treatment.**  Etiologic and pathogenic factors in evolution the mechanical, physical, chemical trauma. Characteristics of oral mucosa modifications in traumatic lesions. Clinical manifestations, differential diagnosis and treatment of oral mucosa traumas.  Pathologic modifications that occur on the surface of oral mucosa in leukoplakia. Clinical picture, positive and differential diagnosis, treatment. | 4 | 2 | 5 | 2 |
|  | Infectious diseases with manifestation in the oral cavity. Principles of diagnosis and treatment.  Oral mucosa lesions in acute and chronic infectious diseases. The character of clinical manifestation and diagnosis importance of modifications in measles, rubella, scarlet fever, dysentery, chicken pox, influenza and others. Treatment and prophylaxis. HIV manifestations an AIDS in the oral cavity. Epidemiological data, positive and differential diagnosis. Treatment and prophylaxis (desinfection remedies with intensive action). Bacterial and viral infection of oral mucosa lesion and lips (candidiasis, ulcerative-necrotic stomatitis Vincent, herpetic infection). | 4 | 2 | 5 | 3 |
|  | **Allergic manifestations in the oral cavity. Exudative polimorth erythema. Chronic reccurent aftous stomatitis.**  Notion of allergy and causes of spread.Immediate and delayed allergic reactions. Mechanisms of tissues lesion. Anaphylactic shock, angioneurotic edema Quincke – emergency treatment. Exudative polimorth erythema, chronic recurrect aftous stomatitis. Clinical picture, positive and differential diagnosis. Treatment. | 4 | 2 | 5 | 3 |
|  | **Changes of oral mucosa in systemic diseases.**  Clinical particularities in symptomatology in some system diseases and specific diseases, that require precocious diagnosis of basic disease and adequate treatment of oral mucosa modifications. Modification of oral mucosa in cardiovascular and gastro-intestinal tract. Buccal clinical manifestation in hypovitaminosis and avitaminosis. Oral mucosa modifications hematopetic system diseases. Clinical manifestations in nervous system diseases. Glosalgia and stomalgia: clinical picture, positive and differential diagnosis. Treatment. | 4 | 3 | 5 | 3 |
|  | **Oral mucosa modifications in endocrine system pathology and disturbance of metabolism.**  Particularities of early oral mucosa modifications in endocrine system in endocrine system pathologies and disturbance of metabolism, that are conditioning primary addressing of patient to the dentist doctor. | 2 | 2 | 5 | 2 |
|  | **Oral mucosa changes in dermatoses.**  Oral mucosa changes in dermatoses. Pemphigus vulgaris: clinical picture, positive and differential diagnosis. Treatment. Pemphigoid: clinical picture, positive and differential diagnosis. Treatment. Liken rubber planus and lupus erythematous: clinical picture, positive and differential diagnosis. Treatment. Importance of oral cavity sanation and hygiene in liken rubber planus and lupus erythematous. Role of prosthetic treatment. Prognosis. | 2 | 2 | 5 | 2 |
|  | **Tongue anomalies and independent glossitis.**  Acute and chronic inflammatory diseases of tongue. Anatomic characters and histologic structure of tongue, vascularization, tongue innervation, types of taste sensitivity. Descuamative and rhomboid glossitis, fissured tongue, haired black tongue: etiology, clinical picture, treatment. | 2 | 2 | 4 | 2 |
|  | **Cheilitis and macrocheilitis.**  Cheilitis: atopic, glandular, exfoliative, eczematous, allergic of contact, actinic and meteorologic. Clinical particularities, differential diagnosis and various symptomatology of cheilitis. Application of new modalities of therapeutic treatment of cheilitis. Macrocheilitis and chronic recurrent fissures of lips: clinical picture, differential diagnosis, treatment. | 2 | 2 | 5 | 2 |
|  | **Precancerous diseases of oral cavity mucosa and lips.**  Obligate and facultative precancerous processes depending on degree probability of malignization. The importance of finding and treating in time the precancerous disease to prevent cancer occurrence and performing a timely treatment. The importance of differential diagnosis in precancerous processes of oral mucosa and red lip margin. Prophylaxis of precancerous disease. | 2 | 2 | 5 | 2 |
| **Total** | | **28** | **21** | **49** | **22** |

**VI. REFERENCE OBJECTIVES AND CONTENTS UNITS**

| **Objectives** | **Content units** |
| --- | --- |
| **Principles of structural organization and professional training in oral medicine** | | |
| * Know the place and role of oral medicine in preparing dentists; * Define the notion of oral medicine, its subject and its tasks; * Be aware that a special differentiation is outlined in therapeutic dentistry. * To know the interdisciplinary aspect within the dental specialties; * Know the principles of dental care organization with responsibility as internist, based on competences in oral pathology and oral medicine; * To know the dental medical documentation, cataloged in oral pathology and oral medicine. | Oral medicine - its structure and role in shaping the future professional in the sphere of health;  Oral medicine works on the interface between dentistry and medicine;  The scope of oral medicine includes non-surgical management of non-dental pathologies, which affect the oromaxilofacial region;  Rules of personal hygiene, ethics and deontology; Dental medical documentation, cataloged in oral pathology and oral medicine;  Guides, sanitary - epidemiological instructions, basic rules in aseptic and antiseptic. |
| **Pathologies of oral mucosa, perioral skin, and oral manifestations of systemic diseases** | | |
| * To know the anatomo-physiological characteristics and the histological structure of the mucosal epithelium of the oral cavity; * Know the primary and secondary lesions of the oral mucosa; * To know the epidemiology, etiology and pathogenesis of the oral mucosal pathologies; * Define the notion of oral pathology; * To know the classifications of oral mucosal diseases (national and international); | Histological structure of mucosal epithelium of the oral cavity (gum, lips, jugular mucosa, palate);  Vascularization and innervation of the mucous membrane of the oral cavity;  Functions of the mucous membrane of the oral cavity;  Structural changes in mucosal age of the oral cavity;  Correct differentiation of primary and secondary lesion elements. Understanding their histological structure in essence;  Etiological and pathogenetic factors in the evolution of oral mucosal diseases;  The characteristic of pathological changes on the oral mucosa in local pathologies and manifestations of systemic diseases; |
| **Clinical examination of the patients with the pathologies of the oral mucosa, perioral skin and oral manifestations of systemic diseases. Subjective and objective examination*.*** | | |
| * Be familiar with ethical principles and medical ethics in examining patients; * Know the stages of the anamnesis and its importance in examining patients; * Know the essential purpose of the clinical examination and its stages; * To know the elements characteristic of oral pathology, their types and their characteristics; * Have knowledge of local and systemic clinical symptoms in oral medicine; * Know the differential diagnosis clinic to establish an exact diagnosis; * Know the pathologies that require multidisciplinary cooperation; * Be able to recognize the limit of professional abilities and refer the patient to other specialists when necessary; | Deontological and ethical conditions in patient examination;  The main purpose and stages of the clinical examination of patients with oral mucosal diseases;  Collection of anamnesis, clinical examination, positive and differential diagnosis with confirmation of local and general clinical symptoms;  The exo and endo-buccal objective exam. evaluation  of the normal varieties of oral tissues, differentiating them from other pathologies that could affect the head and neck areas;  The primary and secondary lyse elements that characterize the mucosal diseases of the oral cavity;  Local symptoms and clinical differentiation for final diagnosis;  The need for multidisciplinary treatment in certain pathologies by working with other specialists. |
| **Methods of paraclinical investigation, applied in the diagnosis of oral mucosal diseases.** | | |
| * Understand the importance of paraclinical investigations in determining the diagnosis of oral mucosal diseases; * To know the types of laboratory paraclinical investigations, tests, tissue biopsies, microbiological tests and to conduct them correctly; * Know the indications for selecting the type of paraclinical investigations as appropriate; * To be able to interpret paraclinical investigation data; * Have knowledge of types, indications and methods of taking samples. | The opportunity and obligation to make early diagnosis of oral pathologies, being beneficial for the patient;  The competence of selecting diagnostic methods;  Laboratory Examinations - for understanding and interpreting the diagnosis;  Bacteriological examination. Characteristic. Indications and clinical significance.  Morphological exam. Characteristic. Indications and clinical significance.  Histological examination. Characteristic. Indications and clinical significance.  The cytological exam. Characteristic. Indications and clinical significance.  Allergic examination. Characteristic. Indications and clinical significance.  Radiological examination. Principles and types of radiological examination. Indications of use. |
| **Treatment and prophylaxis of oral mucosal diseases.** | | |
| * To be able to evaluate, treat the affections of the oral mucosa; * To be able to prevent oral and maxillofacial manifestations of systemic diseases based on clinical presentations; * To use in the daily activity the new methods of treatment and prophylaxis of dental diseases; * To have deep knowledge about the risk factors in oral medicine and methods of preventing them; * Understand the need for multidisciplinary treatment; * Early detection of precancerous diseases. | Elaboration of the oral pathology treatment scheme, based on preparations with local and general action;  Determining the sequence of treatment steps of the most common mucosal diseases of the oral cavity;  Selection of the mucosal treatment particularities of the oral cavity according to the lesion element;  Determination of higher efficacy drugs in the treatment of oral pathologies;  Correction and normalization of buccal mucosal microbiocenoses in the context of complex treatment;  Use in the daily work of new methods of treatment and prophylaxis of oral diseases;  Early informing the patient about the prevention of risk factors;  The need for specialized treatment of precancerous diseases in the specialized institutions. |

**VII. Specific professional competences (SC) and transversal competences and finalities of the study**

**Professional competencies (specific) (CS)**

CP1: Knowledge, understanding and application of specific language in oral medicine. Its role and importance in dentistry. TO be be familiar with the purpose and objectives of the given discipline;

CP2: To understand the processes of etiology, pathogenesis, epidemiology, diagnosis, prevention and management of oral disorders and symptoms, which may be primary or primary simptoms of systemic illnesses.

    CP3: Accumulating holistic knowledge about the patient's condition. Synthesis of diagnosis, differential diagnosis, prognosis of common diseases and oral mucosal disorders. Capability to make early diagnosis of oral pathologies; to bear responsibility as an internist in oral medicine;

   CP4: Have knowledge in the clinic of local symptoms and systemic signs, clinical differentiation to establish the final diagnosis and treatment plan. Completing patient medical records;

   CP5: Be competent in selecting diagnostic tests, as an example of tissue biopsy, microbiological exam, and perform them correctly, and based on the results obtained, make the most objective decisions;

   CP6: Have deep knowledge of the risk factors in oral medicine and inform the patient of the methods to prevent them.

**Transverse competencies (CT)**

   CT1: Capacities to form professional personal attitude and receive appropriate decisions;

   CT2: Possession of skills to work in group, promotion of initiative and dialogue;

   CT3: Interdisciplinary projects, extracurricular activities and presentation of individual scientific projects.

**Study finalizations**

• To know the pathologies of the oral mucosa, grouped after specific and characteristic presentation in the oral cavity;

• To know the categories of pathologies / systemic states that may present oral manifestations and determine the sequence of stages of examination of the most common mucosal diseases of the oral cavity;

• To be competent in selecting diagnostic methods and bear responsibility and compulsion to perform early dianosis of oral pathologies;

• To be able to interpret and apply correctly test results, tissue biopsies, microbiological samples, etc .;

• To be competent in developing a treatment plan for oral pathologies based on preparations with local and general action and capable of correcting and normalizing microbiocenosis of oral mucosa in the context of complex treatment;

• Early detection of precancerous diseases for which specialized treatment is needed in the specialized institutions.

**VIII. tHE STUDENT’S INDIVIDUAL wORK**

| **Nr.** | **The expected product** | **Implementation strategies** | **Evaluation criterias** | **Terms of realization** |
| --- | --- | --- | --- | --- |
| 1. | Working with information sources: | Studying the material on the subject in the handbook, lectures.  To know and select the source of additional information on the subject from the list of recommended supplementary literature. Selection of additional information using electronic addresses.  Acquiring the material to the theme and summarying the essential content. Formulation of the topic / subject conclusions. | Ability to generalize the material and extract the essence. | During the semester |
| 2. | Practical work with the patient | To analyze the information obtained from the anamnesis, the objective and paraclinical examination (tests, biochemical analyzes, microbiological tests), the established diagnosis and the treatment plan.  Applying the established treatment steps.  Recording of the performed maneuvers in the specialized medical record of the patient, formulation of the recommendations for the patient.  Applying the theoretical knowledge gained in seminars, in practical work with the patient | According to the student's workload. Solving the clinical situation. Ability to complete the medical record of the thematic patient | During the semester |
| 3. | Apply different learning techniques |  | Demonstrating the understanding of the problem.  The level of scientific argumentation and understanding of the essence of different subjects.  Quality of conclusions and elements of creativity. Workload. | During the semester |
| 4. | Working with online materials | Studying online materials on the Chair's Website. Expressing your own opinions through forum and chat. Online self-evaluation. | Number and duration of entries on the Site, self-evaluation results. | During the semester |
| 5. | Preparing and supporting the project. | Selection of the research theme, establishment of the work plan, setting the terms for finalizing the research. Establishing the PowerPoint project / theme components - theme, purpose, results, conclusions, practical applications, bibliography. Colleagues reviews.Teachers reviews | Workload on the project. The level of penetration in the essence of the research topic and the scientific argumentation. The fairness of the conclusions and the presence of the elements of creativity. Way of presentation. | During the semester |

**IX. METHODOLOGICAL SUGGESTIONS FOR TEACHING-LEARNING-EVALUATION**

**Teaching and learning methods used**

The teaching of *Oral Pathology* discipline applies various methods and didactic methods, oriented towards the efficient acquisition of the material and achieving the objectives of the didactic process. In the lectures, alongside traditional methods (lesson-exposure, lesson-conversation, synthesis lesson), modern methods (lesson-debate, lecture-conference, problem-lesson) are also used. Practical forms of individual, frontal, group work. In order to acquire deeper material, various semiotic systems (scientific language, graphic and computerized language) and teaching materials (tables, diagrams, micro photographers) are used. The lectures use Communication Technologies - PowerPoint presentations.

**Recommended learning methods**

* Acquiring the material taught at lessons based on the lecture notes and the manual;
* Observation - Identification of elements characteristic of structures or biological phenomena, description of these elements or phenomena.
* Analysis - Imaginary decomposition of the whole into component parts and the study of each as part of the whole. Highlight and select key items.
* Comparison - Comparison of selected objects / processes (researched) in order to determine the essential characteristics of each, to highlight the common features and to determine the differences. Establishment criteria for decommissioning. Formulation of conclusions.
* Classification - Identification of structures / processes requiring classification. Determination of classification criteria. Distribution of structures / processes by groups according to established criteria.
* Elaboration of the scheme - Selection of elements, which must be included in the schema. Playing the Elements Selected by Different Symbols / Colors and Indicating Their Relationships. Wording of an appropriate title and legend of the symbols used.
* Modeling - Identifying and selecting the elements needed to model the clinical situation. Imaging (graphically, schematically) the clinical situation studied. To formulate some conclusions based on findings.
* **Applied didactic strategies / technologies (specific to the subject taught)**

Face-to-face, individual, brainstorming, group discussion, clinical case analysis, teambuilding, clinical exam simulation, mini-research, comparative analysis.

* **Methods of assessment (including an indication of how the final grade is calculated)**

**Current:** Current checks during seminars and practical work. For the individual work done during the semester, the student is evaluated, the grade being included in totals. At the end of the semester, based on the grades obtained during the semester, the average annual grade is calculated.

**Final:** The course ends with a colloquy. The note at the colloquium is based on the annual average score. Notes 5 and above are equivalent to "attested", which will be passed to the notes book. The average annual score will be expressed in numbers according to the scoring scale indicated in the table.

**How to round up the grades at the evaluation steps**

| Intermediate note grid (annual average, grades from the exam stages) | National scoring system | Equivalent  ECTS |
| --- | --- | --- |
| **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:*** *The failure to present the exam without good reason is recorded as "absent" and is equivalent to 0 (zero). The student is entitled to 2 repeated claims of the unsuccessful exam.*

1. **RECOMMENDED BIBLIOGRAPHY:**
2. *Obligatory:*
3. Anne Field, Lesley Longman, William R. Tyldesley. Tyldesleys oral medicine, 5th

Edition.Oxford

1. Steven L. Bricker, Robert P.Langlais, Craig S. Miller. Oral diagnosis, oral medicine, and treatment planning.

*B. Additional*

1. Oral Pathology: Clinical Pathologic Correlations. Seventh Edition. Copyright, 2017.
2. Nicolaiciuc, Valentina. Practical guide : clinical practical lessons for the 5th year of study 10th

semester / V. Nicolaiciuc ; State University of Medicine and Pharmacy "Nicolae Testemitanu",

the Department of Therapeutical Dentistry. - Chişinău : Medicina, 2012