**CURRICULAR PROGRAM**

Course title: **Dermatovenereology**  
Course code: **S.11.0.085**  
Specialty: **Stomatology**  
Specialty code: **1703**  
Faculty: **Medicine nr.2**  
Department: **Dermatovenereology**  
Year: **IV**, semester: **8**  
Course type: **Required discipline**  
Total hours – **42**  
Including lectures – **12** hours, practical studies – **30** hours  
Credit with assessment: **semester 8th**  
Total number of course credits: **2**  
Course in charge persons:  
- Dr. Assoc. Professor Mircea Bețiu  
- Dr. Assoc. Professor Vladislav Gogu  
- Assoc. Assistant Vasile Tabarna  
- Lab assistant Iulia Emet  

**Chisinau 2011**

*Dermatovenereology Course Purpose:*
Learning some dermatoses and sexual transmitted infections (STIs) localized at the maxillofacial area and in the oral cavity with high rates of morbidity and obtaining basic skills in the field of management of patients with these pathologies.

**Training objectives for Dermatovenereology course:**

At the cognition and understanding level:

- to identify basic cutaneous lesions and their peculiarities at the level of oral cavity;
- to know clinical and paraclinical diagnostic criteria of skin diseases and STIs localized at the head area and in the oral cavity;
- to know principles of general and local treatment applicable in dermatovenereology;
- to know evolitional particularities of dermatoses related with age.

At the practice level:

- to perform dermatological examination;
- to evaluate the results of laboratory investigations;
- to perform specific dermatological treatments which are conferred on stomatologists;
- to approve the prescribed treatment;

At the level of integration:

- to appreciate the importance of dermatology as part of general medicine;
- to develop the knowledge of interrelation between dermatology and connected medical specialties;
- to posses the abilities to implement and integrate the acquired knowledge for the management of patients with skin and sexually transmitted diseases;
- to be able to objectively assess its knowledge in Dermatovenerology;
- to able to learn new methods of diagnosis and treatment in Dermatovenerology

**Conditions and Demands Required**

The Dermatovenerology is a clinical discipline which is part of Internal Medicine, studying it at the University level permits a future stomatologist to understand and explore principles of the management of patients with skin and sexually transmitted diseases localized on the head and in the oral cavity. Dermatovenerology has close interdisciplinary connection in the context of high medical education. In this way, knowledge, in the field of Dermatovenerology, contribute to the formation of holistic health concept and complex applicative skills. For good results in learning the Dermatovenerology is required knowledge of the following disciplines:
- Basic subjects: Anatomy; Histology, Citology and Embriology; Physiology of maxillofacial region; Biochemistry of oral cavity; Molecular biology and human genetics; Microbiology, virology and immunology;

- Pre-clinical subjects: Pathophysiology and clinical pathophysiology; Morfopatology; Pharmacology and clinical pharmacology; Internal medicine – semiology; General Surgery – semiology; Therapeutic stomatology;

- Clinical subjects: Internal medicine; Obstetrics and ginecology; Maxillofacial surgery; Neurology; Oftalmology; Otorinolaryngology.

**Content of the Course:**

**A. Lectures**

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<thead>
<tr>
<th>Nr.</th>
<th>Topic/Theme</th>
<th>Total Hours</th>
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<tbody>
<tr>
<td>1.</td>
<td>Anatomy, histology and physiology of the skin and oral mucosa. The methodology of dermatological examination (primary and secondary lesions).</td>
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<td>2.</td>
<td>Cutaneous infections of the maxillofacial region: pyodermas and mycobacterial infections (cutaneous tuberculosis, leprosy).</td>
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<td>3.</td>
<td>Cutaneous infections of the maxillofacial region: superficial fungal infections and candidiasis; virus diseases: herpes simplex and human papilmovirus infection.</td>
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<td>4.</td>
<td>Mucocutaneous manifestations of the acquired and congenital syphilis and HIV/AIDS.</td>
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<td>5.</td>
<td>Stomatologic profile in certain dermatoses: autoimmune pemphigus, lichen planus, erythema multiforme, Stevens – Johnson and Lyell syndromes.</td>
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<td>6.</td>
<td>Diseases specific to the oral cavity: aphthous stomatitis, cheilitis, glossitis Behcet disease. Pre-malignant lesions and malignant tumors of the oral cavity.</td>
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**B. Practical lessons**

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<thead>
<tr>
<th>Nr.</th>
<th>Topic/Theme</th>
<th>Total hours</th>
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<tbody>
<tr>
<td>1.</td>
<td><strong>The methodology of dermatological examination:</strong></td>
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<td></td>
<td>• General examination and physical examination of the skin (primary</td>
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skin lesions: macule, papule, nodule, vesicle, bulla, pustule, wheal; secondary skin lesions: secondary macules, scale, crust, fissure, erosion, ulceration, scar, excoriation, vegetation, lichenification).

- Laboratory diagnosis (direct microscopic examination, culture on Sabouraud’s medium, Wood’s light examination, Tzanck smear, skin biopsy, immunofluorescence microscopy, skin tests to suspected allergens, etc.).
- Basic pathologic reactions in the skin (dyskeratosis, hyperkeratosis, parakeratosis, hypergranulosis, acanthosis, spongiosis, vacuolar alteration of the keratinocytes, exocytosis, acantholysis, papilomatosis, cell infiltrate).

**The basis of treatment in dermatology:**

- Topical treatment – general principles, excipient, active substances (antibacterial, antimycotic, antiviral, antiinflammatory, etc.), topical medication vehicles (powders, mixtures, lotions, oil, gel, nail polish, emplastrum, soap, shampoo, paste, cream, ointment, solutions, spray).
- Systemic treatment – the basic groups of medicines which are used in dermatovenerology.
- Physical therapy in dermatology (phototherapy, radiotherapy, cryotherapy, electrotherapy, lasertherapy, hydrotherapy)
- Surgical treatment (local excision with primary suture, excision and skin grafting, curetage, scratching, dermabrasion)

**Practical skills:** Inspection, palpation, curetage, diascopy, Nicolsky sign, exam with bulbous-end probe (Pospelov sign). Identification of the histopathological findings.

2. **Pyodermas.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis:

   - Staphylococcal skin infections: superficial folliculitis (osteofolliculitis) and deep folliculitis (sycosis vulgaris); perifolliculitis (furuncle, furunculosis, carbuncle).
   - Streptococcal skin infections: impetigo contagiosa, angular cheilitis, lichen simplex, erysipelas.

**Parasitic skin diseases.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis:

   a. Scabies;
   b. Pediculosis.

**Viral infections of the skin.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis.
Plane warts;
- Papillomas;
- *Molluscum contagiosum*;
- Herpes simplex;
- Herpes zoster (shingles).

**Management of the patient (case history).**

**Practical skills:** students have to perform and explain the results of direct microscopic examination and bacterial exam in pyodermas. Prescription of the topical treatment: correct treat of pyogenic focus. To perform and explain the results of direct microscopic examination in scabies, Tzanck smear in herpes simplex.

3. **Mucocutaneous mycosis.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis:
- Dermatophytosis (*tinea capitis, faciei, barbae*) – microsporia, tricophytosis, favus, epidermophytosis, rubromycosis.
- Pityrosporum infections – pityriasis versicolor
- Candidiasis.

**Acne vulgaris.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, differential diagnosis, treatment, prophylaxis.

**Rosacea.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis.

**Practical skills:** students have to perform and explain the results of Baltzer, Besnier and “Celsii honeycomb” signs; Wood’s light examination; direct microscopic examination in dermatomycosis; the results of bacterial exam in acne vulgaris; direct microscopic examination in rosacea.

4. **Autoimmune diseases of the skin:**

**Chronic cutaneous lupus erythematosus.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis.

**Localized scleroderma (morphoea).** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis:
- Morphoea in plaques;
- Morphoea liniara.

**Dermatomyositis.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis,
positive/differential diagnosis, treatment, prophylaxis.

**Sjogren’s syndrome.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis.

**Vitiligo.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis.

**Alopecia areata.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis.

**Practical skills:** students have to perform and explain the Besnier-Mescersky, “carpet tack”, “orange skin” signs, diascopy; to determine and appreciate the minimal erythema dose; temperature and tactile skin sensitivity in vitiligo.

**5. Sexually transmitted diseases (STI):**

**Syphilis.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, management of the patients and follow-up, prophylaxis.

- Acquired syphilis:
  - early (primary; secondary; early latent)
  - late (tertiary; late latent)
- Congenital syphilis (early; late; latent).

**HIV/AIDS infection.** Clinical features and evolution of the cutaneous manifestations:

- Mucocutaneous infections:
  - viral infections;
  - bacterial infections;
  - fungal infections;
  - parasitic skin diseases.
- Nonspecific cutaneous manifestations:
  - seborrheic dermatitis;
- Neoplastic cutaneous manifestations:
  - HIV-associated Kaposi’s sarcoma.

**Practical skills:** students have to reveal and appreciate diascopy, bulbous – end probe, Baltzer and Besnier signs. Obtaining the material for serologic tests, the technical procedures and the evaluation of results in patients with syphilis. Penicillin allergy testing. The penicillin and benzathine penicillin administration regimen appropriate to the stage of syphilis.

**6. Non-infectious dermatoses affecting the oral mucosa and head area:**

**Autoimmune pemphigus.** Definition, epidemiology, etiology,
**Pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis:**

- Pemphigus vulgaris,
- Pemphigus seborrheic.

**Lichen planus.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis.

**Psoriasis.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis.

**Allergic dermatosis.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis:

- Urticaria, angioedema.
- Eczema – exogenous (contact dermatitis, allergic dermatitis), endogenous (atopic dermatitis), exo/endogenous (eczema nummular eczema, microbial eczema, varicose eczema, dyshidrotic eczema, seborrheic eczema).

**Drug induced reactions specific for the stomatological practice:** allergic manifestations on the antibiotic and sulfanilamide medicines, topical anesthetics, iodine-containing substances, mercury.

**Erythema multiforme.** Definition, epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis:

- Minor form;
- Major form (Stevens-Johnson and Lyell syndromes).

**Practical skills:** students have to reveal and appreciate Nikolsky and Asboe-Hansen signs, Tzanck smear; to reveal and appreciate skin tests to suspected allergens (patch, scratch and prick tests), to determine, appreciate dermographism in patients suffering from allergic dermatosis.

The prescribing of topical treatment: indications and appropriate use of wet dressings, mixtures, water-in-oil and oil-in-water emulsions, pastes, sprays.

**Diseases specific to the oral cavity:**

- aphthous stomatitis;
- Behcet syndrome;
- chronic cheilitis: glandularis, angular, simple, macrocheilitis (Meischer, Melkersson-Rosenthal syndrome);
- glossitis: scrotal, rhomboidal, hairy tongue, oral hairy leukoplakia.

**Pre–malignant lesions of the lips and oral cavity:**

- hyperkeratotic cheilitis (desquamative, abrasive Manganotti);
- actinic cheilitis;
- leukoplakia;
- erythroplakia;
- papilomatosis

Tumors of the lips and oral cavity:
- benign: epulis, Fordyce disease, gingival fibromatosis, hemangioma;
- malignant: squamous cell carcinoma, melanoma.

List of textbooks:

A. The obligatory:

B. The additional:
12. European guidelines for the management of STIs. Internet.
Methods of teaching and studying applied: Dermatovenerology taught as a clinical subject in a classic manner/style combining lectures with practical lessons. Students must be present throughout the course as on lectures so as on practical sessions. The titular of the course reads lectures during the theoretical course. At the practical lessons, students study the subject of Dermatovenerology on the basis of University Clinic by means of physical examination of stationary and ambulatory patients, they discuss the basic and the most difficult topics in the interactive manner, resolve tests, fill out medical histories and review clinical cases. The department of Dermatovenerology reserves the right to carry out some practical lessons in an interactive manner.

Suggestions for individual activities:
1. To work with information sources, reading them carefully, taking notes
2. To work with exercise book for practical lessons
3. To get acquainted with the main studying techniques:
   4. Observation;
   5. Analysis;
   6. Comparison;
   7. Classification;
   8. Diagrams’ development;
   9. Modeling
10. Experiment.

Evaluation methods:
Assessment of knowledge, on the subject of dermatovenerology, is hold in two phases: formative and summative evaluation.

Formative evaluation take place each day on practical lessons and consist of several stages: the oral response, the comment of a clinical case, the implementation of practical skills. Formative assessment provides the obligatory presence of students at all lectures / practical lessons. If student missed a lesson, he must recover it. Formative assessment includes two separate constituents: annual mark and practical skills.

Annual mark is counted as the arithmetic mean estimate based on daily grades obtained during the course, at the same time the final mark should not be lower than 5. Daily assessment represents arithmetic mean of all tasks performed during the practical sessions, which are measured from 0 to 10, the minimum grade is 5. Otherwise, the student will be forced to make additional effort to recover these practical lessons to correct unsatisfactory note.

Admission to the practical skills is provided only if the annual mark is positive. The practical skills are carried out at the patient’s bedside, where student presents the case history, which was written by him earlier. Students' knowledge are assessed by professor, on the base of execution of practical skills and presentation of clinical case. The practical test is held on the last day of the course and marks are graded from 0 to 10, the minimum grade is 5.

Summative evaluation of knowledge is implemented in the form of a credit with assessment which consists of oral test. Students whose annual mark is lower than “5” are not
admitted to the final examination, as well as the students who did not recover the absences in practical lessons.

The oral test is performed by given the examination card which contains 3 questions. Student has 30 minutes to prepare. The test is graded from 0 to 10.

Topics for credit assessment (questions for the oral test) are approved at the meeting of department and are presented to students at the beginning of the semester.

The final mark consists of three components: the annual mark (coefficient 0.3), practical skills test (coefficient 0.2), oral test(coefficient 0.5).

Estimation of knowledge is made for each compartment separately with marks from 10 to 1 rounding up to tenth and hundreth.

Final mark consists of amount of current evaluation and final exam and is estimated with marks from 10 to 1 rounding up to 0.5 tenth.

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<tr>
<th>Sum of marks of current evaluation and final exam</th>
<th>Final mark</th>
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<td>5 -5.09</td>
<td>5.0</td>
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<tr>
<td>5.1- 5.59</td>
<td>5.5</td>
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<td>5.6 – 6.09</td>
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<td>6.1 – 6.59</td>
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<td>6.6 – 7.09</td>
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<td>9.6 - 10</td>
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A non-motivated absence at the examination is considered an “absence” and is equal with mark “0” (zero).

Student has right to perform the failed exam twice.

**Teaching Languages:** English,
**Assessment Scale**

Knowledge assessment is graded from “10” to “1”, not considering the tenth. Marks from “5” to “10” permit to gain the credits corresponding the Plan of Study. Final mark results from the sum of current assessments and marks from the final examination being rounded off to a whole number. The student who gets the mark lower than “5” in the current assessment is not admitted to the final examination.

- **Grade “10”** or “excellent” is given for a deep and remarkable demonstration of the theoretical and practical competences, 91-100% of the material of the course.
- **Grade “9”** or “very good” is given for a very good demonstration of the theoretical and practical competences, 81-90% of the material.
- **Grade “8”** or “good” is given for a good demonstration of the theoretical and practical competences, 71-80% of the material of the course.
- **Grade “7”** or “satisfactorily” is given for knowing 66-70% of the material of the course.
- **Grade “6”** or “satisfactorily” is given for the demonstration of the basic competences, 61-65% of the material of the course.
- **Grade “5”** or “low” is given for the demonstration of minimal competences, 51-60% of the material of the course.
- **Grade “4”** or “unsatisfactory” is given for knowing 31-40% of the material.
- **Grade “3”** or “unsatisfactory” is given for knowing 31-40% of the material.
- **Grade “2”** or “unsatisfactory” is given for the minimal knowledge of the material, 21-30%.
- **Grade “1”** or “unsatisfactory” is given for the minimal knowledge of the material, 0-20%.