**FacultY OF MEDICINE**

**STUDY PROGRAM 0912.1 MEDICINE**

**DEPARTMENT / CHAIR OF Dermatovenereology**

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| APPROVEDat the meeting of the Commission for Quality Assurance and Evaluation of the Curriculum faculty \_\_\_\_\_\_\_\_\_\_\_\_Minutes No.\_\_\_ of \_\_\_\_\_\_\_\_\_\_\_\_Chairman \_\_dr.hab.șt.med, conf. univ.\_\_ (academic degree, scientific title)Suman Serghei \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (signature) | APPROVEDat the Council meeting of the Faculty \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Minutes No.\_\_\_ of \_\_\_\_\_\_\_\_\_\_\_\_\_Dean of Faculty dr.of medicine, univ. conf.  (academic degree, scientific title)Betiu Mircea \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (signature) |
| APPROVEDapproved at the meeting of the chair of DermatovenereologyMinutes No.35 of 16.05.2024Head of chair\_Doctor of medicine, Associate professorMircea Betiu\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (signature) |

**SYLLABUS**

DISCIPLINE **Dermatovenereology\_**

**Integrated studies/Cycle I, License**

Type of course: **Compulsory**

Curriculum was elaborated by the group of authors:

Bețiu, Mircea, dr. șt. med. conf. univ.

Gogu, Vladislav, dr. șt. med. conf. univ.

Emeț, Iulia, ass. profesor

 Chisinau, 2024

1. **INTRODUCTION**
* General presentation of the discipline: place and role of the discipline in the formation of the specific competences of the professional / specialty training program

Dermatovenereology represents the branch of internal medicine, which studies etiology, epidemiology, pathogenesis, diagnostics, treatment and prophylaxis of skin and sexually transmitted infections. Cutaneous maladies, as well as sexually transmitted infections are common diseases, which are manifested through an extreme variety of clinicalsymptoms. Learning of the dermatovenereology basis is important for training of different specialists in medicine, due to the fact that skin lesions serve as external, often early signs of internal organs pathology, nervous, endocrine or immune systems involvement. Accurate diagnosis of cutaneous disorders is essential for prevention of poor prognosis, as well as, early detection of sexually transmitted infection prevents its spreading among population.

Mission of the curriculum (aim) in professional training is to learn about some important dermatoses and sexually transmitted infections and to create essential abilities for managing these diseases.

* Language (s) of the course: English;
* Beneficiaries: students of the \_\_VI\_\_ year, faculty \_\_Medicine nr,2.
1. **MANAGEMENT OF THE DISCIPLINE**

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| Code of discipline | **S.11.O.092** |
| Name of the discipline | **Dermatovenereology** |
| Person(s) in charge of the discipline | **Head of the department Doctor of medicine, Associate professor – Mircea Betiu** |
| Year  | **VI** | Semester/Semesters | **XI** |
| Total number of hours, including: | **120** |
| Lectures | **20** | Practical/laboratory hours | **20** |
| Seminars | **20** | Self-training | **60** |
| Clinical internship |  |
| Form of assessment | **E** | Number of credits | **4** |

1. **TRAINING aims within the discipline**

# *At the end of the discipline study the student will be able to:*

# *at the level of knowledge and understanding:*

* *to understand the theoretical bases of modern Dermatovenerology;*
* *to identify the anatomo-physiological and pathological features of cutaneous organ and of low genitourinary tract;*
* *to identify basic cutaneous lesions;*
* *to be able to know clinical and paraclinical diagnostic criteria of skin diseases and STIs;*
* *to be able to know principles of general and local treatment applicable in dermatovenereology;*
* *to able to reproduce the information related to prevention of cutaneous and sexually transmitted diseases;*
* *to able to know evolutional particularities of dermatoses related with age.*

# *at the application level:*

* *to obtain and record the case history, and appreciate the functions of the skin and lower genitourinary tract;*
* *to examine the skin, hair, nails, mucous membranes and genitalia using special tests and procedures;*
* *be able to use practical skills for diagnosis and treatment of patients with dermatological  and sexually transmitted diseases;*
* *to evaluate the results of clinical, laboratory and instrumental investigations;*
* *to approve the prescribed treatment;*
* *to be able to correctly interpret the data recorded in the medical file.*

# *at the integration level:*

* *to appreciate the importance of dermatology as part of general medicine;*
* *to develop the knowledge of interrelation between dermatology and connected medical specialties;*
* *to possess 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 the own knowledge in Dermatovenerology;*
* *to be able to  learn new methods of diagnosis and treatment in Dermatovenerology.*
1. **provisional terms and conditions**

The Dermatovenerology is a clinical discipline, a part of Internal Medicine, studying it at the University level by future doctors, permits to understand and explore the principles of management of patients with skin and sexually transmitted diseases. 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 Dermatovenerology are required knowledge in the field of following disciplines:

* Basic subjects: Anatomy; Histology, Citology and Embriology; Physiology and medical rehabilitation; Biochemistry and clinical biochemistry; Molecular biology and human genetics; Microbiology, virology and immunology;
* Pre-clinical subjects: Pathophysiology and clinical pathophysiology; Morfophatology; Pharmacology and clinical pharmacology; Internal medicine – semiology; General Surgery – semiology; Pediatrics – semiology and puericulture;
* Clinical subjects: Internal medicine; Obstetrics and ginecology; Surgery; Pediatrics; Urology; Neurology; Oftalmology; Otorinolaryngology; Pneumophtysiology; Endocrinology; Hematology and Oncology; Infectious diseases; Epidemiology.
1. **themes and ESTIMATE ALLOCATION of hours**

***Lectures, practical hours/ laboratory hours/seminars and self-training***

| No.d/o | ТHEME | Number of hours |
| --- | --- | --- |
| Lectures | Seminars/Practical hours | Self-training |
|  | Introduction into speciality. Anatomy and histology of the skin. Physiology of the skin. Methodology of dermatological examination. Basis of treatment in dermatology.  | 2 | 2/2 | 6 |
|  | Adnexal diseases .  | - | 1/1 | 3 |
|  | Viral infections of the skin. | - | 1/1 | 3 |
|  | Bacterial infections of the skin (Pyodermas). | 2 | 2/1 | 4 |
|  | Parasitic skin infections. | - | -/1 | 2 |
|  | Mucocutaneous mycosis. | 2 | 2/2 | 6 |
|  | Mycobacterial infections of the skin. | 2 | - | 2 |
|  | Papular immune-mediated  dermatoses**.** | 2 | 2/2 | 6 |
|  | Autoimmune skin disorders. | 4 | 3/3 | 10 |
|  | Allergic dermatoses.  | 2 | 2/2 | 6 |
|  | Genodermatoses.  | - | 1/1 | 2 |
|  | Malignant neoplasms of the skin. | 2 | - | 2 |
|  | Sexually transmitted infections (STIs). | 2 | 3/3 | 7 |
|  | Dermatological manifestations of HIV/AIDS.  | - | 1/1 | 1 |
| **Total**  | **20** | **20/20** | **60** |
| **120** |

1. **Practical skills evaluated at the completion of the course**

List of essential practical procedures includes:

* Performing and interpretation of Baltzer’s sign in pityriasis versicolor.
* Performing and interpretation of scratch (Besnier) sign in pityriasis versicolor.
* Performing and interpretation of Kerion Celsi (honeycomb) sign in infiltrative form of Tinea capitis
* Performing and interpretation of Wood’ s lamp examination in cutaneous mycoses
* Performing and interpretation of psoriatic triad.
* Performing and interpretation of Wickham phenomenon in lichen planus.
* Performing and interpretation of Besnier-Mescersky sign in chronic cutaneous lupus erythematosus.
* Performing and interpretation of „carpet-tack” sign in chronic cutaneous lupus erythematosus.
* Performing and interpretation of „orange peel” sign in chronic cutaneous lupus erythematosus.
* Performing and interpretation of dermographism on patients suffering from allergic dermatoses.
* Performing and interpretation of Nicolsky and Asboe-Hansen signs in bullous dermatoses.
* Performing and interpretation of Jadassohn test in dermatitis herpetiformis Duhring-Brocq.
* Performing and interpretation of „apple jelly” sign in cutaneous tuberculosis.
* Performing and interpretation of Pospelov sign in cutaneous tuberculosis.
1. **REFERENCE OBJECTIVES of CONTENT UNITS**

| **Objectives** | **Content units** |
| --- | --- |
| **Theme (chapter) 1. Structure of the skin. Skin functions. Methodology of examination in dermatology. Basis of treatment in dermatology.** |
| * + To define fundamental principles of dermato-venereology.
	+ To know basic principles of clinical examination in dermatology.
	+ To know basic semiology of the skin.
	+ To know modern methods of laboratory investigations used in dermatology.
	+ To know basic principles of treatment in dermatology.
	+ To know basic principles of prophylaxis in dermatovenerology.
	+ To demonstrate knowledge in the field of human anatomy and morphopatology, physiology and patho-physiology, pharmacology.
	+ To apply as inspection, palpation, raclaj, diascopy,
	+ To identify histopathological skin processes and their significance.
	+ To integrate gained knowledge in preclinical and clinical disciplines through assemble of conclusions and proper opinion.
 | 1. Anatomy and histology of the skin.
 |
| 1. Biochemistry and physiology of the normal skin.
 |
| 1. Diagnosis of skin diseases: general principles.
 |
| 1. General examination and physical examination of the skin (primary skin lesions: macule, papule, nodule, vesicle, bulla, pustule, wheal).
 |
| 1. General examination and physical examination of the skin (secondary macules, scale, crust, fissure, erosion, ulceration, scar, excoriation, vegetation, lichenification).
 |
| 1. Laboratory examination in dermatological practice.

(direct microscopic examination, culture on Sabouraud’s medium, Wood’s light examination, Tzanck smear, skin biopsy, imunofluorescence microscopy, skin tests to suspected allergens, etc.).  |
| 1. Basic pathologic reactions of the skin. **(**dyskeratosis, hyperkeratosis, parakeratosis, hypergranulosis, acanthosis, spongiosis, vacuolar alteration of the keratinocytes, exocytosis, acantholysis, papilomatosis, cell infiltrate).
 |
| 1. General aspects of treatment in dermatology.
* Topical treatment – general principles, excipient, active substances (antibacterial, antimycotic, antiviral, antiinflammatory, etc.), topical medication vehicles (powders, mixtures, lotions, oils, 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, curretage, scratching, dermabrasion)
 |
| **Theme (chapter) 2.** Adnexal diseases. |
| * To define acne vulgaris and rosacea.
* To know etiopathogenic aspects of acne vulgaris and rosacea.
* To know classification of acne vulgaris and rosacea.
* To know clinical manifestations of acne vulgaris and rosacea.
* To demonstrate abilities for diagnostic of acne vulgaris and rosacea.
* To know basic principles of treatment of acne vulgaris and rosacea.
* To know basic principles of prophylaxis of acne vulgaris and rosacea.
* To integrate gained knowledge in preclinical and clinical disciplines through assemble of conclusions and proper opinion.
 | 1. Acne vulgaris: epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Rosacea: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| **Theme (chapter) 3.** **Viral infections of the skin.** |
| * To define viral infections of the skin.
* To know etiopathogenic aspects of viral infections of the skin.
* To know classification of viral infections of the skin.
* To know clinical manifestations of viral infections of the skin.
* To know lab exams important for confirmation of viral infections of the skin.
* To demonstrate abilities for diagnostic of viral infections of the skin.
* To know basic principles of treatment of viral infections of the skin.
* To demonstrate knowledge to provide first aid to patients with viral infections of the skin.
* To know basic principles of prophylaxis of viral infections of the skin.
* To integrate gained knowledge in preclinical and clinical disciplines through assemble of conclusions and proper opinion.
 | 1. Warts (common, flat, palmar and plantar;): epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Condyloma acuminatum: epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. *Molluscum contagiosum*: epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Herpes simplex: epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Herpes (Zona) zoster: epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Pityriasis rosea Gibert: epidemiology, etiology, pathogenesis, classification, clinical features, complications, laboratory diagnosis, positive/differential diagnosis, treatment, prophylaxis.
 |
| 1. Cutaneous manifestations in COVID-19.
 |
| **Theme (chapter) 4.** Pyodermas. (Bacterial infections of the skin) |
| • To define bacterial infections of the skin.* To know etiopathogenic aspects of bacterial infections of the skin.
* To know classification of bacterial infections of the skin.
* To know clinical manifestations of bacterial infections of the skin.
* To know lab exams important for confirmation of diagnosis in bacterial infections of the skin.
* To demonstrate abilities for diagnostic of bacterial infections of the skin.
* To know basic principles of treatment of bacterial infections of the skin.
* To demonstrate knowledge to provide first aid to patients with bacterial infections of the skin.
* To know basic principles of prophylaxis of bacterial infections of the skin.
* To integrate gained knowledge in preclinical and clinical disciplines through assemble of conclusions and proper opinion.
 | 1. Staphylococcal folliculitis - superficial folliculitis (osteofolliculitis) and deep (sycosis vulgaris): epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Staphylococcal perifolliculitis (furuncle, furunculosis, carbuncle): epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Staphylococcal infections of sweat glands (suppurative hidradenitis, multiple abscesses of the newborn): epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Staphylococcal infections of glabrous skin (bullous impetigo, Ritter’s disease): epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Superficial streptococcal skin infections (non-bullous impetigo, blistering distal dactylitis, intertrigo): epidemiology, etiology, pathogenesis, clinical features, positive/ differential diagnosis, treatment.
 |
| 1. Deep streptococcal skin infections (ecthyma, erysipelas): epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| **Theme (chapter) 5.** Parasitic skin infections. |
| * To define parasitic skin infections.
* To know etiopathogenic aspects of parasitic skin infections.
* To know classification of parasitic skin infections.
* To know clinical manifestations of parasitic skin infections.
* To know lab exams important for confirmation of diagnosis in parasitic skin infections.
* To demonstrate abilities for diagnostic of parasitic skin infections. .
* To know basic principles of treatment of parasitic skin infections.
* To demonstrate knowledge to provide first aid to patients with parasitic skin infections.
* To know basic principles of prophylaxis of parasitic skin infections.
* To integrate gained knowledge in preclinical and clinical disciplines through assemble of conclusions and proper opinion.
 | 1. Scabies: epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Pediculosis: epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| **Theme (chapter) 6.** Mucocutaneous mycosis. |
| • Să definească infecțiile micotice cutaneo-mucoase • To define mucocutaneous mycosis.* To know etiopathogenic aspects of mucocutaneous mycosis.
* To know classification of mucocutaneous mycosis.
* To know clinical manifestations of mucocutaneous mycosis.
* To know lab exams important for confirmation of diagnosis in mucocutaneous mycosis.
* To demonstrate abilities for diagnostic of mucocutaneous mycosis.
* To apply practical skills as:
* performing and interpretation of Baltzer’s sign in pityriasis versicolor;
* performing and interpretation of scratch (Besnier) sign in pityriasis versicolor;
* performing and interpretation of Kerion Celsi (honeycomb) sign in infiltrative form of Tinea capitis;
* performing and interpretation of Wood’ s lamp examination in cutaneous mycoses.
* To know basic principles of treatment of mucocutaneous mycosis.
* To demonstrate knowledge to provide first aid to patients with mucocutaneous mycosis.
* To know basic principles of prophylaxis of mucocutaneous mycosis.
* To integrate gained knowledge in preclinical and clinical disciplines through assemble of conclusions and proper opinion.
 | 1. Mucocutaneous mycosis: general aspects.
 |
| 1. Keratophytoses – pityriasis versicolor: epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Dermatophytosis (*tinea)* **–** microsporia, tricophytosis, favus, epidermophytosis, rubromycosis. - epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Tinea capitis (dermatophytosis of the scalp): epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Tinea corporis, cruris: (dermatophytosis of the glabrous skin and folds): epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Tinea pedis and tinea manuum: epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Tinea unghuium: epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Cutaneous candidiasis: epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Mucous candidiasis: epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| **Theme (chapter) 7.** Mycobacterial infections of the skin |
| • To define mycobacterial infections of the skin.* To know etiopathogenic aspects of bacterial mycoinfections of the skin.
* To know classification of mycobacterial infections of the skin.
* To know clinical manifestations of mycobacterial infections of the skin.
* To know lab exams important for confirmation of diagnosis in mycobacterial infections of the skin.
* To demonstrate abilities for diagnostic of mycobacterial infections of the skin.
* To apply practical skills as:
* performing and interpretation of „apple jelly” sign in cutaneous tuberculosis;
* performing and interpretation of Pospelov sign in cutaneous tuberculosis.
* To know basic principles of treatment of mycobacterial infections of the skin.
* To demonstrate knowledge to provide first aid to patients with mycobacterial infections of the skin.
* To know basic principles of prophylaxis of mycobacterial infections of the skin.
* To integrate gained knowledge in preclinical and clinical disciplines through assemble of conclusions and proper opinion.
 | 1. Tuberculosis of the skin - multibacillary forms: (tuberculosis chancre, scrofuloderma, orificial tuberculosis): epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Tuberculosis of the skin - paucibacillary forms (lupus vulgaris, warty tuberculosis): epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Tuberculosis of the skin (tuberculids): epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Leprosy: epidemiology, etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
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| **Theme (chapter) 8.** Papular immune-mediated dermatoses |
| • To define papular immune mediated dermatoses.* To know etiopathogenic aspects of papular immune-mediated dermatoses.
* To know classification of papular immune-mediated dermatoses.
* To know clinical manifestations of papular immune-mediated dermatoses.
* To know lab exams important for confirmation of diagnosis in papular immune-mediated dermatoses.
* To demonstrate abilities for diagnostic of papular immune-mediated dermatoses.
* To apply practical skills as:
* performing and interpretation of psoriatic triad;
* performing and interpretation of Wickham phenomenon in lichen planus;
* To know basic principles of treatment of papular immune-mediated dermatoses.
* To demonstrate knowledge to provide first aid to patients with papular immune-mediated dermatoses.
* To know basic principles of prophylaxis of papular immune-mediated dermatoses.
* To integrate gained knowledge in preclinical and clinical disciplines through assemble of conclusions and proper opinion.
 | 1. Psoriasis vulgaris: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Severe types of psoriasis (erythrodermic psoriasis, pustular psoriasis and psoriatic arthritis): etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Lichen planus: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| **Theme (chapter) 9.** Autoimmune skin disorders. |
| * To define autoimmune dermatoses.
* To know etiopathogenic aspects of autoimmune dermatoses.
* To know classification of autoimmune dermatoses.
* To know clinical manifestations of autoimmune dermatoses.
* To know lab exams important for confirmation of diagnosis in autoimmune dermatoses.
* To demonstrate abilities for diagnostic of autoimmune dermatoses.
* To apply practical skills as:
* performing and interpretation of Besnier-Mescersky sign in chronic cutaneous lupus erythematosus;
* performing and interpretation of „carpet-tack” sign in chronic cutaneous lupus erythematosus;
* performing and interpretation of „orange peel” sign in chronic cutaneous lupus erythematosus;
* performing and interpretation of Nicolsky and Asboe-Hansen signs in bullous dermatoses;
* performing and interpretation of Jadassohn test in dermatitis herpetiformis Duhring-Brocq.
* To know basic principles of treatment of autoimmune dermatoses.
* To demonstrate knowledge to provide first aid to patients with autoimmune dermatoses.
* To know basic principles of prophylaxis of autoimmune dermatoses.
* To integrate gained knowledge in preclinical and clinical disciplines through assemble of conclusions and proper opinion.
 | Part 1 |
| 1. Chronic cutaneous lupus erythematosus: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Localized scleroderma (morfeea): etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Alopecia areata: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.

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| 1. Vitiligo: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.

Part 2 |
| 1. Autoimmune bullous diseases (pemphigus vulgaris, pemphigus vegetans): etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Autoimmune bullous diseases (pemphigus erythematosus, pemphigus foliaceus): etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Dermatitis herpetiformis Duhring-Brocq: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
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| **Theme (chapter) 10.** Allergic dermatoses. |
| • To define allergic dermatoses.* To know etiopathogenic aspects of allergic dermatoses.
* To know classification of allergic dermatoses.
* To know clinical manifestations of allergic dermatoses.
* To know lab exams important for confirmation of diagnosis in allergic dermatoses.
* To demonstrate abilities for diagnostic of allergic dermatoses.
* To apply practical skills as:
* performing and appreciation of dermographism in patients with allergic dermatoses;
* To know basic principles of treatment of allergic dermatoses.
* To demonstrate knowledge to provide first aid to patients with allergic dermatoses.
* To know basic principles of prophylaxis of allergic dermatoses.
* To integrate gained knowledge in preclinical and clinical disciplines through assemble of conclusions and proper opinion.
 | 1. Eczema: general aspects. Allergic contact dermatitis: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Irritant contact dermatitis: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Atopic dermatitis: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Exo/endogenous eczemas: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Urticaria: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Drug induced reactions of the skin, toxic epidermal necrolysis: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Erythema multiforme, Stevens-Jonson syndrome: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Cutaneous small vessel vasculitis (Henoch-Schonlein purpura, leykocytoclastic vasculitis): etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| **Theme (chapter) 11.** Genodermatoses. |
| * To define some genodermatoses.
* To know etiopathogenic aspects of some genodermatoses.
* To know classification of genodermatoses.
* To know clinical manifestations of some genodermatoses.
* To know lab exams important for confirmation of diagnosis in some genodermatoses.
* To demonstrate abilities for diagnostic of some genodermatoses.
* To know basic principles of treatment of genodermatoses.
* To demonstrate knowledge to provide first aid to patients with some genodermatoses.
* To know basic principles of prophylaxis of genodermatoses.
* To integrate gained knowledge in preclinical and clinical disciplines through assemble of conclusions and proper opinion
 | 1. Ichthyosis vulgaris: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Epidermolysis bullosa: etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.

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| **Theme (chapter) 12.** Malignant neoplasms of the skin. |
| * To define malignant neoplasms of the skin.
* To know etiopathogenic aspects of malignant neoplasms of the skin.
* To know classification of malignant neoplasms of the skin.
* To know clinical manifestations of malignant neoplasms of the skin.
* To know lab exams important for confirmation of diagnosis in malignant neoplasms of the skin.
* To demonstrate abilities for diagnostic of malignant neoplasms of the skin.
* To know basic principles of treatment of malignant neoplasms of the skin.
* To demonstrate knowledge to provide first aid to patients with malignant neoplasms of the skin.
* To know basic principles of prophylaxis of malignant neoplasms of the skin.
* To integrate gained knowledge in preclinical and clinical disciplines through assemble of conclusions and proper opinion.
 | 1. Skin cancer (basal cell carcinoma and squamous cell carcinoma): etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Kaposi sarcoma (classic and endemic forms): etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
| 1. Cutaneous T-cell lymphoma (mycosis fungoides): etiology, pathogenesis, clinical features, positive/differential diagnosis, treatment.
 |
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| **Theme (chapter) 13.** Sexually transmitted infections (STIs). |
| * To give definition of Sexually transmitted infections (STIs)
* To know etiopathogenic aspects of sexually transmitted infections (STIs)
* To know epidemiological features of sexually transmitted infections (STIs)
* To know classification of sexually transmitted infections
* To know clinical aspects of sexually transmitted infections
* To know laboratory tests important for diagnosis of sexually transmitted infections
* To show abilities for:
* establishing the diagnosis of sexually transmitted infections;
* Filling the in-patient and out-patient medical record of people with STIs.
* To know principles and methods of treatment for sexually transmitted infections
* To know methods of active revealing of sexually transmitted infections
* To know principles of sexually transmitted infections prophylaxis
* To integrate gained knowledge with preclinical and clinical disciplines for creation of personal conclusions and opinion.
 | 1. Syphilis: epidemiology and etiology. Methods of *Treponema pallidum* identification.
 |
| 1. Syphilis: pathogenesis and natural history of disease. Immunity and reactivity.
 |
| 1. Primary syphilis: clinical features and laboratory findings.
 |
| 1. The syphilitic chancre: clinical features and differential diagnosis.
 |
| 1. Atypical forms of syphilitic chancre: clinical features and differential diagnosis.
 |
| 1. Complications of syphilitic chancre.
 |
| 1. Secondary syphilis: clinical features and laboratory findings.
 |
| 1. Macular syphilide (roseola rash): clinical features and differential diagnosis.
 |
| 1. Papular syphilide: clinical features and differential diagnosis.
 |
| 1. Pustular syphilide: clinical features and differential diagnosis.
 |
| 1. Pigmentary syphilide (leucomelanoderma) and syphilitic alopecia: clinical features and differential diagnosis.
 |
| 1. Secondary syphilis – lesions of the mucous membranes: clinical features and differential diagnosis
 |
| 1. Tertiary syphilis: clinical features and laboratory findings.
 |
| 1. Tubercular syphilide: clinical features and differential diagnosis.
 |
| 1. Gumma syphilide: clinical features and differential diagnosis.
 |
| 1. Early congenital syphilis: clinical features and differential diagnosis.
 |
| 1. Late congenital syphilis: clinical features and differential diagnosis.
 |
| 1. Latent syphilis: definition, classification and positive diagnosis.
 |
| 1. Serological tests for syphilis.
 |
| 1. Treatment of syphilis: principles and methods.
 |
| 1. Syphilis control and follow-up.
 |
| 1. Prophylaxis of syphilis. Methods of patient active revealing.
 |
| 1. Gonorrhea: epidemiology, etiology, pathogenesis, classification and laboratory findings.
 |
| 1. Uncomplicated gonorrhea: clinical features and laboratory findings
 |
| 1. Complicated gonococcal infection in women: clinical features and laboratory findings.
 |
| 1. Complicated gonococcal infection in men: clinical features and laboratory findings.
 |
| 1. Management of the patients with gonorrhea. Prophylaxis of gonorrhea. Methods of patient active revealing
 |
| 1. Trichomonas vaginalis uro-genital infection: epidemiology, etiology, pathogenesis, clinical findings, laboratory findings, treatment and prophylaxis.
 |
| 1. Genital Chlamydia and Ureaplasma infections: epidemiology, etiology, pathogenesis, clinical findings, laboratory findings, treatment and prophylaxis.
 |
| **Theme (chapter) 14.** Dermatological manifestations of HIV/AIDS. |
| * To define HIV infecțion.
* To know etiopathogenic aspects of HIV infection.
* To know classification of cutaneous manifestations of HIV/AIDS.
* To know clinical manifestations of cutaneous manifestations of HIV/AIDS.
* To know lab exams important for confirmation of diagnosis in HIV infection and in cutaneous manifestations of HIV/AIDS.
* To demonstrate abilities for diagnostic of HIV infection by cutaneous manifestations tipical for HIV/AIDS.
* To know basic principles of treatment of HIV infection and cutaneous manifestations of HIV/AIDS.
* To demonstrate knowledge to provide first aid to patients with HIV infection with cutaneous manifestations.
* To know basic principles of prophylaxis of HIV infection.â
* To integrate gained knowledge in preclinical and clinical disciplines through assemble of conclusions and proper opinion.
 | * 1. Dermatological manifestations of AIDS: pathogenesis, clinical features, positive/differential diagnosis.
* Mucocutaneous infections:
	+ viral infections;
	+ bacterial infections;
	+ fungal infections;
	+ parasitic skin infections;
* Non-infectious cutaneous manifestations:
* seborrheic dermatitis;
* Malignant cutaneous manifestations:
* cutaneous lymphomas;
* Kaposi sarcoma.
 |

1. **PROFESSIONAL (Pc) and TRANSVERSAL (Tc) COMPETENCES AND STUDY OUTCOMES**
* **Professional competences (Pc)**
* **CP1.** Responsible execution of professional tasks with the application of the values and norms of professional ethics, as well as the provisions of the legislation in force
* **CP2.** Adequate knowledge of the sciences about the structure of the body, physiological functions and behavior of the human body in various physiological and pathological conditions, as well as the relationships between health, physical and social environment
* **CP3.** Resolving clinical situations by developing a plan for diagnosis, treatment and rehabilitation in various pathological situations and selecting appropriate therapeutic procedures for them, including providing emergency medical care
* **CP4.** Promoting a healthy lifestyle, applying prevention and self-care measures
* **CP5.** Interdisciplinary integration of the doctor's activity in a team with efficient use of all resources
* **CP6.** Carrying out scientific research in the field of health and other branches of science
* **Transversal competences (tc)**
* **TC1.** Autonomy and responsibility in the activity
* **Study outcomes**

**At the end of the course student will be able to:**

* to appreciate importance of Dermatovenereology in Medicine context;
* to deduce interconnections between Dermatovenereology and other clinical, preclinical and fundamental disciplines;
* to be able to implement and integrate gained knowledge for managenet of a dermatologic patient;
* to know ethiology, pathogenesis and epidemiology of skin diseases and sexually transmitted infections;
* to know basic principles of general clinic exam of a dermatologic patient;
* to know main symptoms of skin diseases, as well as, sexually transmitted infections (STIs);
* to be able to establish a preventive diagnosis of some dermatologic diseases and STIs;
* to know criteria of clinical and paraclinical diagnotics for dermatogic diseases and STIs;
* to master practical skills for diagnosis of some dermatologic and venereologic diseases;
* to know principles of treatment of some dermatologic and venereologic diseases;
* to perform specific dermatologic treatments provided by specialists;
* to perform diagnostic and therapeutic emergency aid in some urgent dermatovenereologic cases;
* to be able to organize and implement either medical examination and preventive measures;
* to respect ethical and deontologic aspects of medical act during communication with collegues, medical assistants and junior personnel, patients relatives;
* to analyse and compill both knowledge and scientific information, to use informational , as well as, communictive technologies.
1. **STUDENT'S self-training**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Expected product  | Implementation strategies | Assessment criteria | Implementation terms |
| 1. | Work with information sources | * Careful reading of lecture or the textbook material on the theme.
* Studying of logic and didactic schemas from the manual and notebook.
* Exploration of the atlas images.
 | The ability to extract the essential; skills to interpret; the volume of work; to make generalizations and conclusions related to the importance of the theme/subject. | throughout the semester |
| 2. | Working with the workbook | * To analyze the information from additional sources.
* Systematic work in libraries and media centers.
* Searching for additional information, using-mail addresses and additional bibliography.
 | Rational thinking and flexibility; quality of systematized information obtained as result of proper activity | throughout the semester |
| 3. | Applicationof various learning techniques | * Solving test on respective theme and write them in notebook;
* Collate tests with answers from the textbook and in case of mistake, revision of material from books and not from key-answers.
 | The volume of work, evaluation of lesson objectives and their implementation, task solution,quality of conclusions | throughout the semester |
| 4. | Working with materials online | Self-assessment online, study of materials online on the WEBSITE of the department, expressing one’s own opinions through the forum and chat | The number and duration of entries on the SITE, the results ofself-assessment | throughout the semester |
| 5. | Essay | * Review of relevant sources on the essay’s theme;
* Review, systematization and synthesis of information gained on the topic;
* Assemble of the essay in accordance with current standards and proper presentation at department.
 | Quality of systematization and review of information gained from the proper activityCorrespondence of the information with topic chosen. |  |
| 5. | Preparation and presentation of research  | * Choice of the theme for research, making plan the research plan, provision of the terms of realization.
* Setting PowerPoint project / theme components, purpose, results, conclusions, practical applications, bibliography.
 | Volume of work, the degree of penetration into the essence of the theme of the project, the level of scientific argumentation, the quality ofconclusions, elements ofcreativity, personal attitude formation, coherence of exposure and scientific correctness, graphic presentation, presentation method. | throughout the semester |

1. **METHODOLOGICAL SUGGESTIONS FOR TEACHING-LEARNING-assessment**
* ***Teaching and learning methods used***

Dermatovenerologyistaught 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 individual work is holding outside of the department (library, at home, etc.). The titular of the course reads lectures during the theoretical course.

Practical lessons may be hold individually, frontally, in the group. Fixing and deepening of the knowledge gained at the course is made on seminars and practical lessons when students study the discipline at the base of the University Dermatovenereology 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. In order to acquire deep knowledge of material, different semiotic systems (scientific language, graphical and computerized language) and didactic materials (tables, diagrams, photophotographs, transparencies) are used. In classes and extracurricular activities Information Communication Technologies - Power Point presentations are used. The department of Dermatovenerology reserves the right to carry out some practical lessons in an interactive manner.

* ***Applied teaching strategies / technologies*** *(specific to the discipline)*
* **Observation** - Identification of characteristic elements of structures or dermatovenerological phenomena, description of these elements or phenomena.
* **Analysis** - Imaginary decomposition of the whole into component parts. Highlighting the essential elements. Studying each element as a part of the whole.
* **Schema / figure analysis** – Choice of the required information. Recognition based on the knowledge and information of structures indicated in the drawing. Analysis of the functions / role of recognized structures.
* **Comparison - Analysis** of the first object / process in a group and determination of its essential features. Analysis of the second object / process and the determination of its essential features. Comparing objects / processes and highlighting common features. Comparing objects / processes and determining differences. Establishing the criteria for decommissioning. Drawing conclusions. Methods of assessment(including the method of final mark calculation)
* **Classification** - Identification of the structures / processes to be classified. Determining the criteria on which classification is to be made. Distribution of structures / processes by groups according to established criteria.
* **Schematic drawing** - Selection of elements, which must be included in the scheme. Playback of the Elements Selected by Different Symbols / Colors and indicating their relationships. Wording of an appropriate title and legend of the symbols used.
* **Modeling** - Identify and select the elements needed for modeling phenomenon. The imaging (graphical, schematic) of the phenomenon studied.
* Presentation of the phenomenon using the developed model. Drawing conclusions, deduced from arguments or findings.
* Applied didactic strategies / technologies (specific to the discipline):
* "Multi-voting"; " Round table"; "Group Interview"; "Case Study"; "Creative Controversy".
* ***Methods of assessment*** *(including the method of final mark calculation)*

**Current***:* 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). It is mandatory for student to obtain during the course at least 3 positive marks. Current evaluation of student’s knowledge includes oral answer, writing test, clinical cases and performance of practical skills, and is appreciated with notes from 10 to 1. In case of writing test, notes from 10 to 1 are appreciated with tenth. At the end of the course, average mark is calculated in SIMU (coefficient 0.3). Formative assessment provides the obligatory presence of students at all lectures / practical lessons. Student must recover the lesson in case when he missed it.

**Final**: consists of 3 (three) components: practical skill test calculated in SIMU (coefficient 0.2), computer-based test (coefficient 0.2) and oral test (coefficient 0.3). Evaluation of the student’s knowledge is assessed with marks from 10 to 1 with two decimal places.

To the final examination are admitted students who have passed the current evaluation with a positive mark and have no absence or recovered them. The practical test is made on patient’s bed, where student reports the examiner patient’s medical record (made earlier in written form), is tested for practical skills relevant to the case and evaluate by the examiner. The exam is held on the final day of the course and is assessed from 0 to 10, the inferior level being mark 5.

The computer-based test consists of 50 questions on the course of Dermatovenereology, of which 40% are single tests, and 60% - multiple-choice tests. The student has 1 hour to do the test. The test is graded from 0 to 10, marks been obtained due to to the scan of the questionnaires using "Test Editor" version of N.Testemiţanu USMF.

The oral test is performed via exam card, which is given to the student and contains 3 questions. The student has 30 minutes to prepare for the answer. The test is grade from 0 to 10.

Subjects for exam (tests, list of practical skills and questions for oral step) are approved at the discipline meeting and are communicated to the students at beginning of the studying year.

The final grade consists of 4 components: annual average score (coefficient 0.3), practical test (coefficient 0.2), computer-based test (coefficient 0.2) and oral test (coefficient 0.3). Evaluation of the student’s knowledge at every step is assessed with marks from 10 to 1 with two decimal places.

The final mark is estimated in SIMU and represents the sum of current evaluation and final evaluations and is assessed from 10 to 1 with two decimals places.

**Method of mark rounding at different assessment stages**

|  |  |  |
| --- | --- | --- |
| Intermediate marks scale (annual average, marks from the examination stages)  | National Assessment 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**  |
| **5,51-6,0**  | **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**  |

The average annual mark and the marks of all stages of final examination (computer assisted, test, oral) - are expressed in numbers according to the mark scale (according to the table), and the final mark obtained is expressed in number with two decimals, which is transferred to student’s record-book.

*Absence on examination without good reason is recorded as "absent" and is equivalent to 0 (zero). The student has the right to have two re-examinations.*

1. **RECOMMENDED literature:**

*A. Compulsory:*

Clinical dermatology R.P.J.B.Weller, J.A.A.Hunter, J.A.Savin, M.V.Dahl; Malden: Blackwell, 2008.

*B. Additional*

1. Rook's Dermatology Handbook / edited by Christopher E. M. Griffiths, Tanya O. Bleiker, Daniel Creamer [et al.]. - Hoboken : Wiley-Blackwell, 2022. - xiv, 1038 p.
2. Fitzpatrick's Dermatology. Vol. 1 / editors: Sewon Kang, Masayuki Amagai, Anna L. Bruckner [et al.]. - 9th ed.. - New York : McGraw-Hill Education, 2019. - xxvii, 2197 p.
3. Fitzpatrick's Dermatology. Vol. 2 / editors: Sewon Kang, Masayuki Amagai, Anna L. Bruckner [et al.]. - 9th ed.. - New York : McGraw-Hill Education, 2019. - xxvii, 2200-3949 p.
4. Dermatology. Vol. 1 / edited by Jean L. Bolognia, Julie V. Schaffer, Lorenzo Cerroni. - 4th ed.. - [Philadelphia] : Elsevier, 2018. - xxviii, 1258 p.
5. Dermatology. Vol. 2 / edited by Jean L. Bolognia, Julie V. Schaffer, Lorenzo Cerroni. - 4th ed.. - [Philadelphia] : Elsevier, 2018. - xxviii, 1259-2674 p.
6. Dermatolody and sexually transmitted deseases/ Z.Petrescu, G.Petrescu. - Iasi: Junimea, 2003
7. James, William D. Andrew’s diseases of the skin. - Philadelphia, 2006.