

**MEDICAL UNIVERSITY – PLOVDIV**  
**FACULTY OF MEDICINE**

**SYLLABUS**

**IN**

**DERMATOLOGY AND VENEREOLOGY**

**FOR MEDICAL STUDENTS**

**Approved by the Department Council – Protocol №38/20.05.2022**

**Confirmed by the Faculty Council – Protocol №6/15.06.2022**

**DERMATOLOGY AND VENEREOLOGY**  
**SYLLABUS**

Discipline	Final exam/ semester	Auditorium classes				ECTS non-auditorium classes	ECTS total	Academic hours in years and semesters	
		Total	Lectures	Practices	ECTS			4-5 year	
Dermatology and venereology	IX							VIII	IX
		90	30	60	3.0	1.5	4.5	1/2	1/2

**DISCIPLINE:**

”Dermatology and Venereology”

**TYPE OF DISCIPLINE ACCORDING TO THE UNIFORM STATE REQUIREMENTS:**

Required

**LEVEL OF QUALIFICATION:**

Master /M/

**FORMS OF TRAINING:**

Lectures, practical lessons, self-study

**YEAR OF TRAINING:**

IV course (VIII semester) and V course (IX semester)

**DURATION OF TRAINING:**

Two semesters

**ACADEMIC HOURS:**

30 hours of lectures and 60 hours of practical lessons

**TECHNICAL EQUIPMENT APPLIED IN THE TRAINING:**

Classrooms equipped with audiovisual technics. Multimedia presentations, discussions, demonstration of patients with skin diseases and sexually transmitted diseases, solving practical diagnostic and therapeutic tasks, demonstrations of research methods in dermatology - taking a biopsy, making microscopic preparations and cultures for mycological research, performing allergological testing and reporting of skin allergy tests, dermatoscopy, serological tests.

**FORMS OF EVALUATION:**

Weekly ongoing assessment, online tests, colloquia, practical exam.

**EVALUATION CRITERIA:**

Mean continuous assessment in each semester.

**ASPECTS OF EVALUATION CRITERIA:**

Participation in discussions, online, writing and oral exam results.

**SEMESTER EXAM:**

Yes / Input online test, written and oral exam results.

**STATE EXAM:**

No

**LECTURER:**

Academic rank lecturer at the Department of Dermatology and Venereology.

**DEPARTMENT:**

Dermatology and Venereology

**ANNOTATION**

The course “Dermatology and venereology” provides an opportunity to acquire knowledge and skills for primary diagnosis, treatment and prevention of the most common dermatological and sexually transmitted diseases.

**BASIC AIMS OF THE DISCIPLINE**

Acquisition of knowledge and skills for application of all modern methods and tools for primary dermatological diagnostics, treatment and prevention:

1. Taking a history in a patient with skin disease.
2. Investigation of skin eruptions:
  - Physical examination with naked eye
  - Examination with a magnifying glass
  - Glass pressure (Vitropresia)
  - Palpation
  - Scraping the skin lesion surface in squamous dermatoses
3. Physical examination of a patient with skin disease and description of the dermatological status (description of skin eruptions)
4. Testing of dermographism
5. Investigation of diagnostic symptoms in some skin diseases.
6. Interpretation of skin allergy tests:
  - Patch test
  - Scarification test

- Intradermal test
  - prick test
7. Observation of microscopy preparations and culture to demonstrate a mycological disease.
  8. Search for scabies mite and microscopy examination.
  9. Physical examination of a patient with sexually transmitted disease.
  10. Preparation and examination of microscopic slides of gonococci.
  11. Interpretation of serological tests for syphilis.
  12. Prescription of local and systemic therapy in dermatology.

## **EXPECTED RESULTS**

After completion of the dermatology course students should have the following knowledge and skills:

1. To possess skills in taking a history of dermatology diseases.
2. To know the main methods for objective examination of skin eruptions.
3. To be able to make a short description of dermatological status.
4. To know the methods for analysis of dermographism, diagnostic symptoms in psoriasis and pemphigus, capillary fragility.
5. To know the characteristics of skin hypersensitivity tests: patch, scarification, intradermal, prick test.
6. To know the phenomena demonstrated in microscopic slides and culture tests to establish a mycological disease.
7. To know the methods for searching scabies mites and phenomena observed in microscopic slides.
8. To know the methods to examine a patient with sexually transmitted disease and be able to make and examine microscopic slides for gonococci.
9. To know and to be able to interpret the methods for serologic diagnostic of syphilis.
10. To be able to write prescriptions for the most frequently used drugs for local and systemic therapy in dermatology.

## **LECTURES**

### ***LECTURE No1 – 2 hours***

INTRODUCTION TO DERMATOLOGY. ANATOMY AND PHYSIOLOGY OF THE SKIN AND VISIBLE MUCOUS MEMBRANES. ABNORMAL CHANGES IN THE EPIDERMIS AND DERMIS. SKIN RASHES.

Anotation

Why we should study dermatology

Basic physiological processes in the skin

Histopathological changes in the skin

Rash elements of the skin

***LECTURE No2 – 2 hours***

BACTERIAL SKIN INFECTIONS. PARASITIS SKIN INFECTIONS. SKIN TUBERCULOSIS.

Annotation

Bacterial skin infections: Staphylococcal and streptococcal skin infections.

Parasitis skin infections: scabies, pediculosis. Tuberculosis of the skin.

***LECTURE No3 – 2 hours***

VIRAL SKIN INFECTIONS

Annotation

Viral skin infections of the herpes group: Herpes simplex, herpes zoster.

Viral skin infections caused by human papilloma viruses: common and flat warts, genital warts.

Viral skin infections of smallpox virus and paravaccina virus: molluscum contagiosum, tuberculum mulgentium, ecthyma contagiosum.

Lyme disease.

***LECTURE No4 – 2 hours***

FUNGAL SKIN INFECTIONS

Annotation

Fungal infections of the skin: dermatomycoses, deep mycoses, candidoses.

***LECTURE No5 – 2 hours***

ERYTHEMO-PAPULO-SQUAMOUS DERMATOSES

Annotation

Erythemo-papulo-squamous dermatoses: psoriasis, lichen ruber planus, pityriasis rosea.

***LECTURE No6 – 2 hours***

AUTOIMMUNE BULLOUS DERMATOSES

Annotation

Autoimmune bullous dermatoses: pemphigus vulgaris, bulous pemphigoid, dermatitis herpetiformes.

***LECTURE No7 – 2 hours***

ERYTHEMATOUS DERMATOSES. SKIN APPENDAGES DISEASES.

Annotation

Erythematous dermatoses: erythema exsudativum multiforme, erythema nodosum.

Diseases of skin appendages: seborrheic dermatitis, acne, rosacea.

Allopecias.

***LECTURE No8 – 2 hours***

ALLERGIC DERMATOSES

Annotation

Allergic shock, hives, strophulus.

***LECTURE No9 – 2 hours***

**ALLERGIC DERMATOSES**

Annotation  
Eczema. Dermatitis.

***LECTURE No10 – 2 hours***

**DRUG INDUCED DERMATOSES**

Annotation  
Skin drug eruptions: Lyell syndrome, medicamentous dermatitis, fixed drug eruption.

***LECTURE No11 – 2 hours***

**AUTOIMMUNE DISEASES OF THE CONNECTIVE TISSUE.**

Annotation  
Lupus erythematosus. Sclerodermia. Dermatomyositis.

***LECTURE No12 – 2 hours***

**PRECANCEROUS SKIN CONDITIONS. BENIGN AND MALIGNANT TUMORS OF THE SKIN.**

Annotation  
Precancerous skin condition.  
Benign tumors of the skin.  
Malignant skin tumors: basal cells carcinoma, squamous cells carcinoma, malignant melanoma.

***LECTURE No13 – 2 hours***

**SYPHILIS.**

Annotation  
Etiology, epidemiology, general course of th syphilis.  
Aquired syphilis – primary, secondary, tertiary stage. Neurosyphilis. Congenital syphilis.  
Diagnosis of syphilis. Treatment of syphilis.

***LECTURE No14 – 2 hours***

**GONORRHEA. NON-GONOCOCCICAL INFECTIONS OF GENITAL TRACT.**

Annotation  
Male gonnorrhea. Female gonorrhea. Children gonorrhea.  
Non-gonococcal urethritis.

***LECTURE No15 – 2 hours***

**AIDS – SKIN MANIFESTATIONS.**

Annotation  
HIV infection. Mucocutaneous manifestations of HIV infection. Kaposi sarcoma.

## PRACTICES

### ***PRACTICAL LESSON No1 – 2 hours***

#### INTRODUCTION TO DERMATOLOGY

Annotation

Why we need to study skin diseases

Examination of a patient with a skin disease – peculiarities in taking the anamnesis and status..

### ***PRACTICAL LESSON No2 – 2 hours***

#### RASH ELEMENTS OF THE SKIN AND VISIBLE MUCOUS MEMBRANES

Annotation

Macular skin lesions.

Solid skin lesions.

Exudative skin lesions.

Skin lesions due to damaged skin integrity.

Waste skin lesions.

Skin lesions due to atrophy, hypertrophy and scarring.

Features of the rash elements on the visible mucous membranes.

### ***PRACTICAL LESSON No3 – 2 hours***

#### RASH ELEMENTS OF THE SKIN AND VISIBLE MUCOUS MEMBRANES

### ***PRACTICAL LESSON No4 – 2 hours***

#### LOCAL TREATMENT OF SKIN DISEASES. TOPICAL FORMULATIONS.

Annotation

Simple and composite topical formulations.

### ***PRACTICAL LESSON No5 – 2 hours***

#### SYSTEMIC TREATMENT OF SKIN DISEASES

Annotation

Groups of drugs by mechanism of action.

### ***PRACTICAL LESSON No6 – 2 hours***

#### BACTERIAL SKIN INFECTIONS

Annotation

Staphylococcal diseases of the skin – staphylococcal diseases of the hair follicle, of the sweat glands, and of the nails.

Streptococcal diseases of the skin – impetigo, erysipelas, ecthyma.

### ***PRACTICAL LESSON No7 – 2 hours***

#### SKIN TUBERCULOSIS. COLLOQUIUM No1.

Annotation

Skin tuberculosis – primary and secondary forms.

Topics of the colloquium No 1 – Skin lesions. Treatment of skin diseases.

***PRACTICAL LESSON No8 – 2 hours***

PARASITIC SKIN INFECTIONS

Annotation

Scabies. Pediculosis. Insect bites.

***PRACTICAL LESSON No9 – 2 hours***

VIRAL SKIN INFECTIONS

Annotation

Herpes simplex. Herpes zoster. Verrucae – common, flat and genital warts.

Ecthyma contagiosum. Tuberculum mulgentium. Molluscum contagiosum.

***PRACTICAL LESSON No10 – 2 hours***

FUNGAL INFECTIONS OF THE SKIN

Annotation

Pityriasis versicolor. Tinea capitis. Tinea corporis. Tinea manum. Tinea pedis. Tinea of the nails.

***PRACTICAL LESSON No11 – 2 hours***

CANDIDAMYCOSES. DEEP MYCOSES.

Annotation

Candidoses of the skin and mucous membranes.

Actinomycosis.

***PRACTICAL LESSON No12 – 2 hours***

ERYTHEMO-PAPULO-SQAMATOUS DERMATOSES

Annotation

Psoriasis vulgaris, lichen ruber planus, pityriasis rosea.

***PRACTICAL LESSON No13 – 2 hours***

AUTHOIMMUNE BULLOUS DERMATOSES

Annotation

Pemphigus vulgaris, bullous pemphigoid, dermatitis herpetiformis.

***PRACTICAL LESSON No14 – 2 hours***

ERYTHEMATOUS DERMATOSES. COLLOQUIUM No 2.

Annotation

Erythema multiforme, erythema nodosum.

Topics of the colloquium No 2 – Skin infections. Erythemo-papulo-squamatus dermatoses.



***PRACTICAL LESSON No15 – 2 hours***

LYME DISEASE.

Annotation

Lyme disease – clinical stages and treatment.

***PRACTICAL LESSON No16 – 2 hours***

ALLERGIC DERMATOSES

Annotation

Urticaria – allergic and non-allergic. Strophulus..

***PRACTICAL LESSON No17 – 2 hours***

DRUG-INDUCED DERMATOSES

Annotation

Allergic shock, Lyell syndrome, Stevens-Johnsson syndrome, medicamentous dermatitis, fixed drug eruption.

***PRACTICAL LESSON No18 – 2 hours***

ECZEMA. DERMATITIS.

Annotation

Eczema.

Dermatitis – non-allergic and allergic contact dermatitis.

***PRACTICAL LESSON No19 – 2 hours***

DERMATOSIS CAUSED BY EXTERNAL FACTORS. PHOTODERMATOSIS.

Annotation

Dermatoses caused by low and high temperature.

Dermatoses caused by mechanical factors.

Photodermatosis.

***PRACTICAL LESSON No20 – 2 hours***

AUTOIMMUNE CONNECTIVE TISSUE DISEASES

Annotation

Lupus erythematosus. Dermatomyositis.

***PRACTICAL LESSON No21 – 2 hours***

AUTOIMMUNE CONNECTIVE TISSUE DISEASES

Annotation

Systemic and localized sclerosis.

***PRACTICAL LESSON No22 – 2 hours***

APHTHOUS DISEASE. COLLOQUIUM No 3.

Annotation

Recurrent aphthosis. Bechet's disease. Aphthous disease.

Topics of the colloquium No3 – Allergic and drug-induced dermatoses. Eczema. Dermatitis. Autoimmune diseases of the connective tissue.

***PRACTICAL LESSON No23 – 2 hours***

SEBORRHOEA AND SEBORRHEIC DISEASES. ACNE. ROSACEA.

Annotation

Seborrhoea. Acne vulgaris. Rosacea.

***PRACTICAL LESSON No24 – 2 hours***

BENIGN TUMORS OF THE SKIN. PRAECANCEROUS DERMATOSES.

Annotation

Benign tumors of the skin and mucoses. Precancerous skin conditions.

***PRACTICAL LESSON No25 – 2 hours***

MALIGNANT DISEASES OF THE SKIN AND MUCOSES.

Annotation

Basal cells carcinoma. Squamous cells carcinoma. Malignant melanoma.

***PRACTICAL LESSON No26 – 2 hours***

SYPHILIS

Annotation

Epidemiology, etiology, clinical presentation and treatment of syphilis.

***PRACTICAL LESSON No27 – 2 hours***

GONORRHEA

Annotation

Male, female and children gonorrhoea.

***PRACTICAL LESSON No28 – 2 hours***

HIV-ASSOCIATED SKIN MANIFESTATIONS

Annotation

AIDS – skin manifestations. Kaposi's sarcoma.

***PRACTICAL LESSON No29 – 2 hours***

NON-GONOCOCCAL GENITAL INFECTIONS. COLLOQUIUM No4.

Annotation

Non-gonococcal genital infections caused by bacteria, viruses, chlamydia, trichomonas, candida.

Topics of the colloquium No 4 – precancerous skin conditions. Benign and malignant skin tumors. Sexually-transmitted diseases.

***PRACTICAL LESSON No30 – 2 hours***

PRACTICAL EXAM

## BIBLIOGRAPHY

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Dermatology Information System. DermIS.

<http://www.dermis.net/dermisroot/en/home/index.htm>

Dermatology Image Bank. John Bezzant.2000.

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Dermatology Atlas. Loyola University Dermatology Medical Education Website.

<http://www.meddean.luc.edu/lumen/MedEd/medicine/dermatology/melton/atlas.htm>

### **Example of Final Test of Dermatology and Venereology**

[http://dermaplovdiv.tripod.com/sample\\_test\\_engl%20-%20HtmlExport/index.html](http://dermaplovdiv.tripod.com/sample_test_engl%20-%20HtmlExport/index.html)

<http://dermaplovdiv.tripod.com/katedra-student-english.htm>

### **Questionnaire for self preparation in Dermatology and Venereology**

<https://www.yumpu.com/en/document/read/63216144/questionnaire-for-self-preparation-in-dermatology-and-venereology>

# **CONSPECTUS OF DERMATOLOGY AND VENEREOLOGY FOR STUDENTS OF MEDICINE**

## **GENERAL DERMATOLOGY**

1. Structure of the epidermis and basement membrane.
2. Structure of the dermis and subcutis.
3. Structure of oral and genital mucosa.
4. Skin appendages – hair, nails, sebaceous and sweat glands.
5. Skin blood and lymphatic vessels. Skin innervation.
6. Skin functions - keratinization, melanogenesis, sweat and sebum secretion.
7. Skin functions – viscoelasticity, thermoregulation, epidermal barrier, skin innervation and immune system.
8. Functions of oral and genital mucosa.
9. Methods of investigation in dermatology.
10. Primary lesions – erythema, pigmentation, petechia, ecchymosis, telangiectasia, purport, papule, nodule, plaque, wheal, lichenification, vesicle, pustule, bulla.
11. Secondary lesions – erosion, excoriation, fissure, ulcer, scale, crust, atrophy, hypertrophy, scar.
12. Characteristics of oral lesions.
13. Histopathological changes in the epidermis, dermis and subcutis.
14. Topical treatment of skin diseases. Types of topical formulations (vehicles).
15. Topical treatment of skin diseases. Types topical agents by mode of action.
16. Systemic treatment of skin diseases.
17. Physical treatment of skin diseases.

## **SKIN DISEASES**

1. Streptococcal skin infections. Impetigo. Erysipelas. Ecthyma.
2. Staphylococcal infections of the hair follicles.
3. Staphylococcal infections of the sweat glands and glabrous skin.
4. Cutaneous tuberculosis. E
5. Pityriasis versicolor.
6. Superficial dermatophyte infections.
7. Deep fungal infections. Actinomycosis.
8. Candidiasis.
9. Scabies
10. Pediculosis.
11. Lyme disease.
12. Herpes simplex virus infections. Herpes siplex.
13. Varicella-zoster virus infections. Varicella. Herpes zoster.
14. Papilloma virus infections. Viral warts.
15. Molluscum contaiosum. Tuberculum mulgentium. Ecthyma contagiosum.
16. Dermatoses due to external factors (physical, chemical and biological).
17. Erythema multifome.

18. Erythema nodosum.
19. Psoriasis vulgaris.
20. Pityriasis rosea.
21. Lichen planus.
22. Pemphigus vulgaris.
23. Bullous pemphigoid.
24. Dermatitis herpetiformis.
25. Urticaria (hives). Angioedema. Papular urticaria.
26. Dermatitis contacta. Eczema contactum.
27. Atopic dermatitis. Atopic eczema.
28. Seborrhoeic dermatitis. Seborrhoeic eczema.
29. Drug eruptions. Etiopathogenesis. Anaphylactic shock. Urticaria and angioedema.
30. Drug eruptions. Toxic epidermal necrolysis (Lyell's disease). Stevens-Johnson syndrome. Fixed drug eruptions.
31. Lupus erythematosus.
32. Dermatomyositis.
33. Systemic sclerosis. Localized scleroderma.
34. Acrocyanosis. Perniones. Raynaud's phenomenon.
35. Chronic venous insufficiency in the lower limbs.
36. Vasculitis. Henoch-Schonlein purpura
37. Disorders of pigmentation. Albinism. Vitiligo. Melasma.
38. Genodermatoses. Ichthyosis vulgaris. Darier's disease. Epidermolysis bullosa.
39. Benign tumours of the skin.
40. Premalignant tumours of the skin.
41. Basal cell carcinoma.
42. Squamous cell carcinoma.
43. Malignant melanoma.
44. Kaposi's sarcoma.
45. Hair diseases.
46. Nail diseases.
47. Sebaceous glands diseases. Seborrhoea. Acne. Rosacea.
48. Aphthosis. (Behcet's disease)
49. Diseases of the lips and tongue. Cheilitis and glossitis.
50. Diseases of the mouth and gums. Gingivostomatitis.

## **SEXUALLY TRANSMITTED INFECTIONS**

1. Syphilis – etiology, pathogenesis, and general disease course.
2. Primary syphilis.
3. Secondary syphilis.
4. Tertiary syphilis.
5. Neurosyphilis.
6. Congenital syphilis.
7. Laboratory tests for syphilis. Treatment for syphilis.
8. Gonococcal infection in men. Complications. Treatment.
9. Gonococcal infections in women. Complications. Treatment.

10. Pediatric gonorrhoea. Extragenital and disseminated gonorrhoea.
11. Non gonococcal urethritis. Complications. Treatment.
12. Balanitis and balanoposthitis.
13. Vulvitis and vulvovaginitis.
14. AIDS (skin and mucosal manifestations).