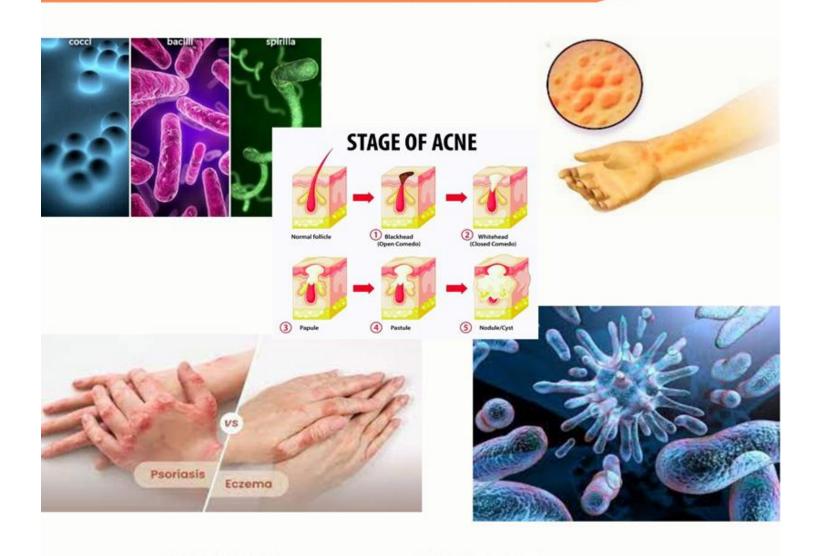
# STUDY GUIDE-FOURTH YEAR MBBS

8th July - 20th July 2024 Duration: 2 Weeks

# **DERMATOLOGY MODULE**







# **STUDY GUIDE FOR DERMATOLOGY MODULE**

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Module name: Dermatology Year: **Four** Duration: 2 weeks (July 2024)

Timetable hours: Interactive Lectures, Case-Based Discussions (CBD), Clinical

Rotations, Demonstrations, Skills, Self- Directed Learning

## **MODULE INTEGRATED COMMITTEE**

| MODULE COORDINATOR: | Dr. Ayesha Hina ( <b>Dermatology</b> ) |
|---------------------|--|
| CO-COORDINATOR:     | Dr. Yusra Nasir ( <b>DHPE</b> )        |

## **DEPARTMENTS & RESOURCE PERSONS FACILITATING LEARNING**

| BASIC HEALTH SCIENCES                                  | CLINICAL AND ANCILLARY DEPARTMENTS |  |
|--|------------------------------------|--|
| PATHOLOGY  | DERMATOLOGY                        |  |
| <ul> <li>Professor Naveen Faridi</li> </ul>            | Dr. Ayesha Hina                    |  |
| PHARMACOLOGY   | ENDOCRINOLOGY                      |  |
| Professor Tabassum Zehra                               | Dr. Aqiba Sarfraz                  |  |
|  | MEDICINE                           |  |
|  | Professor Karimullah Makki         |  |
| DEPARTMENT of HEALTH PROFESSIONS EDUCATION             |                                    |  |
| <ul><li>Professor Nighat Huda</li><li>Profes</li></ul> | sor Sobia Ali • Dr. Afifa Tabassum |  |
| Dr. Muhammad Ahsan Naseer    Dr. Yu:                   | sra Nasir                          |  |

## **LNH&MC MANAGEMENT**

- Professor Karimullah Makki, Principal, LNH&MC
- Dr. Shaheena Akbani, Director A.A & R.T LNH&MC

## **STUDY GUIDE COMPILED BY:**

Muhammad Javed Anwar, Department of Health Professions Education

## **INTRODUCTION**

#### WHAT IS A STUDY GUIDE?

It is an aid to:

- Inform students how the student learning program of the module has been organized
- Help students organize and manage their studies throughout the module
- Guide students on assessment methods, rules, and regulations

#### THE STUDY GUIDE:

- Communicates information on the organization and management of the module. This will help the student to contact the right person in case of any difficulty.
- Defines the objectives which are expected to be achieved at the end of the module.
- Identifies the learning strategies such as lectures, small group teachings, clinical skills, demonstration, tutorial, and case-based learning that will be implemented to achieve the module objectives.
- Provides a list of learning resources such as books, computer-assisted learning programs, weblinks, and journals for students to consult to maximize their learning.
- Highlights information on the contribution of continuous on the student's overall performance.
- Includes information on the assessment methods that will be held to determine every student's achievement of objectives.
- Focuses on information about examination policy, rules, and regulations.

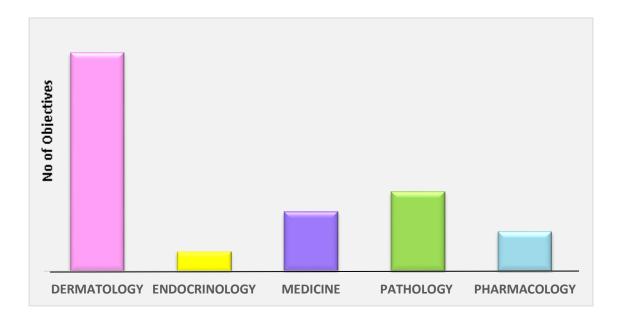
#### **CURRICULUM FRAMEWORK:**

Students will experience an integrated curriculum similar to previous modules.

**INTEGRATED CURRICULUM:** Comprises system-based modules such as Eye/ENT, dermatology, genetics, rehabilitation, and neurosciences-II & psychiatry modules which link basic science knowledge to clinical problems. Integrated teaching means that subjects are presented as a meaningful whole. Students will be able to have a better understanding of basic sciences when they repeatedly learn about clinical examples.

**LEARNING EXPERIENCES**: Case-based integrated discussions, Task-oriented learning followed by task presentation, skills acquisition in skills lab, computer-based assignments, and learning experiences in clinics, and wards.

# **INTEGRATING DISCIPLINES OF DERMATOLOGY MODULE**



## **LEARNING METHODOLOGIES:**

The following teaching/learning methods are used to promote better understanding:

- Interactive Lectures
- Small Group Discussion
- Case- Based Discussion (CBD)
- Clinical Experiences
   Clinical Rotations
- Skills session
- Self-directed learning

**INTERACTIVE LECTURES:** In large groups, the lecturer introduces a topic or common clinical conditions and explains the underlying phenomena through questions, pictures, videos of patients' interviews, exercises, etc. Students are actively involved in the learning process.

**SMALL GROUP SESSION:** This format helps students to clarify concepts, acquire skills or desired attitudes. Sessions are structured with the help of specific exercises such as patient cases, interviews, or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials, and self-study. The facilitator's role is to ask probing questions, summarize, or rephrase to help clarify concepts.

**CASE-BASED DISCUSSION (CBD)**: A small group discussion format where learning is focused on a series of questions based on a clinical scenario. Students discuss and answer the questions by applying relevant knowledge gained previously in clinical and basic health sciences during the module and construct new knowledge. The CBD will be provided by the concerned department.

**CLINICAL LEARNING EXPERIENCES:** In small groups, students observe patients with signs and symptoms in hospital wards, clinics, and outreach centers. This helps students to relate knowledge of basic and clinical sciences of the module and prepare for future practice.

CLINICAL ROTATIONS: In small groups, students rotate in different wards like Medicine, Pediatrics, Surgery, Obs & Gynae, ENT, Eye, Family Medicine clinics, outreach centers & Community Medicine experiences. Here students observe patients, take histories and perform supervised clinical examinations in outpatient and inpatient settings. They also get an opportunity to observe medical personnel working as a team. These rotations help students relate basic medical and clinical knowledge in diverse clinical areas.

**SKILLS SESSION:** Skills relevant to the respect modules are observed and practiced where applicable in the skills laboratory.

**SELF-DIRECTED LEARNING:** Students assume responsibilities for their learning through individual study, sharing and discussing with peers, and seeking information from Learning Resource Center, teachers, and resource persons within and outside the college. Students can utilize the time within the college's scheduled hours of self-directed learning.

## **MODULE 6: DERMATOLOGY**

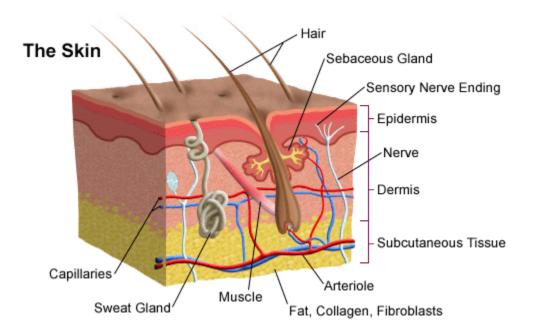
## **INTRODUCTION**

Dermatology is the branch of medicine that deals with skin, mucous membranes, hair, and nails. Although relatively straightforward to examine, the skin is the largest organ weighing about 16% of total body weight and has numerous potential abnormalities.

There are about 1500 distinct skin diseases and many variants. About 15% of consultations in general practice relate to a skin problem and between 50% and 75% of individuals may have a skin problem at any time.

Most dermatological conditions are highly visible and can have profound psychosocial effects. Disfigurement can result in negative self-perception, depression, social rejection, and social isolation related to an unfavorable self-image. Skin conditions affecting the face may require aggressive treatment even if they are clinically relatively mild. Disturbance of body image is particularly serious if it arises during childhood or adolescence, as is the case for birthmarks, atopic eczema, and acne.

This module will discuss the impact of skin diseases, outline the biology of normal skin, and describe how to examine the skin and how its diseases may be effectively treated. A range of skin infections, inflammatory skin diseases, and neoplastic conditions will be briefly described as well as skin signs of systemic disease.



## **COURSE OBJECTIVES AND STRATEGIES**

By the end of the Dermatology module students should be able to:

## **DERMATOLOGY**

| OBJECTIVES  | LEARNING<br>STRATEGY |
|---|----------------------|
| 1. Basic terminologies of skin  |                      |
| Classify skin lesions   |                      |
| • Define common terminologies including primary and secondary dermal and epidermal lesions,   | 1                    |
| and histo pathological terms, Seborrhic / Atopic dermatitis, Macule, patch, papule, plaque,   |                      |
| vesicle, bullae, pustule, nodule, wheal, excoriation, exfoliation, erosion, ulcer, erythema,  |                      |
| purpura, lichenification, Telangiectasia, ecchymosis granulosis, spongiosis and hyperkeratosis,   |                      |
| Introduction to dermatology   | _                    |
| Diagnose common dermatologic conditions based on information provided in written  |                      |
| scenarios, photographs, or by simulated patients  | -                    |
| 2. Bacterial infections   | 4                    |
| Classify Impetigo, Ecthyma, Cellulitis, Folliculitis, Furuncle, Carbuncle, Erysipelas, and     Negratising Execution association association association association association. |                      |
| Necrotising Fasciitis, according to depth of skin layers and causative organisms  | _                    |
| Discuss their clinical presentation and epidemiology  | -                    |
| 3. Viral infections   | 4                    |
| Classify viral skin infections  | _                    |
| Discuss Herpes Simplex and Zoster, Chicken Pox, Viral warts, and Molluscum Contagiosum  | _                    |
| 4. Fungal Infections  | _                    |
| Define fungal skin infections   | _                    |
| Classify fungal infection   | _                    |
| Discuss Dermatophyte infections, Candida Albicans, and Pityriasis Versicolor  | _                    |
| 5. Parasitic Infections   | Interactive          |
| Discuss the clinical presentation and treatment of Scabies, Pediculosis, and Leishmaniasis  | Lecture              |
| 6. Acne   | 4                    |
| Define Acne   | _                    |
| Classify the types of Acne  | _                    |
| Discuss the pathogenesis and treatment of Acne  |                      |
| 7. Eczema   |                      |
| Define eczema   |                      |
| Classify the different types of Eczema  |                      |
| Discuss their pathogenesis and treatment  |                      |
| 8. Psoriasis  |                      |
| Define Psoriasis  |                      |
| Classify the causative factors of psoriasis   |                      |
| Discuss its associated disorders, complications, and treatment  |                      |
| 9. Lichen Planus  |                      |
| Define Lichenoid lesions  |                      |
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## LIAQUAT NATIONAL MEDICAL COLLEGE

| Discuss clinical presentation and treatment of lichen planus                            |             |
|---|-------------|
| 10. Urticaria   | Interactive |
| Define urticarial   | Lecture     |
| Classify urticarial diseases  |             |
| Discuss the clinical presentation and treatment of these lesions                        |             |
| 11. Bullous Disorders   |             |
| Define bullous disorders  | Interactive |
| Classify bullous disorders  | Lecture     |
| Discuss clinical presentation and treatment of Pemphigus Vulgaris, Bullous Pemphigoid,  | Lecture     |
| Dermatitis Herpetiformis, and Epidermolysis Bullosa                                     |             |
| 12. Cutaneous manifestations of systemic diseases                                       |             |
| Discuss skin changes associated with SLE, Thyroid disorders, Diabetes Mellitus, Hepatic |             |
| disorders, Kidney disorders, and Malignancies (e.g. Para-Neoplastic Syndrome)           | Interactive |
| 13. Cutaneous drugs reactions   |             |
| • Define Steven Johnson Syndrome, Toxic Epidermal Necrolysis, and Erythema Multiformis  |             |
| Discuss the clinical presentation and treatment of these lesions                        |             |

## **ENDOCRINOLOGY**

| OBJECTIVES   | LEARNING<br>STRATEGY |
|--|----------------------|
| Describe the clinical presentations of common dermatologic conditions of Diabetes Mellitus |                      |
| <ul> <li>Cutaneous manifestation of diabetes</li> </ul>                                    | Lecture              |

## **INFECTIOUS DISEASE**

| OBJECTIVES   | LEARNING<br>STRATEGY |
|--|----------------------|
| Skin Manifestations of Sexually Transmitted Diseases (STD)   |                      |
| Define STD   | Interactive          |
| Discuss the clinical presentation of Gonorrhoea, Chancroid, Syphilis, Lymphogranuloma<br>Venerum (LGV) and Granuloma Inguinale | Lecture              |

## **MEDICINE**

| OBJECTIVES   | LEARNING<br>STRATEGY |
|--|----------------------|
| 1. Cutaneous drugs reactions   |                      |
| List the drugs that can cause drug reactions   |                      |
| Describe the skin manifestation of drug reactions  | Interactive          |
| 2. Cutaneous manifestations of kidney & para-neoplastic diseases   |                      |
| Discuss the clinical presentations of common dermatologic conditions related to kidney disorders & malignancies including Para-Neoplastic Syndrome |                      |
| List the drugs that can cause drug reactions   |                      |

• Describe the skin manifestation of drug reactions

## **PATHOLOGY**

| OBJECTIVES   | LEARNING<br>STRATEGY  |
|--|-----------------------|
| 1. Infectious diseases of the skin   |                       |
| Discuss common infections of the skin including Verrucae (warts), Molluscum          |                       |
| Contagiosum, Impetigo, and superficial fungal infection, Panniculitis, Disorder      |                       |
| of Epidermal appendages.   | Interactive Lecture / |
| 2. Acute and chronic inflammatory dermatoses   | SDL                   |
| • Explain the pathogenesis and clinical presentations of various acute & chronic     | -                     |
| inflammatory dermatoses including Urticaria, Acute Eczematous Dermatitis,            |                       |
| Erythema Multiforme, Psoriasis, Seborrheic Dermatitis, and Lichen Planus,            |                       |
| Mycosis fungoides  |                       |
| 3. Disorders of pigmentation and vesicular (Bullous) diseases                        |                       |
| Discuss pigmentation disorders including Freckles, Lentigo, Nevi, and Melanoma       | Interactive           |
| • Describe the pathogenesis and clinical features of various blistering disorders of | Lecture               |
| the skin   |                       |
| 4. Tumors of Dermis and Epidermis  |                       |
| Classify tumors of skin and subcutis   | Interactive           |
| Describe important types of skin tumors with pathogenesis, morphology, and           | Lecture               |
| clinical features (Actinic Keratosis, Squamous Cell Carcinoma, Basal Cell            |                       |
| Carcinoma, Dermato-fibroma, Dermato-fibrosarcoma protuberance)                       |                       |

## **PHARMACOLOGY**

| OBJECTIVES  | LEARNING<br>STRATEGY |
|---|----------------------|
| 1. Systemic and topical antifungal drugs  |                      |
| Discuss the classification and mechanism of action of oral & topical steroids     | Interactive          |
| <ul> <li>Commonly used drugs, antifungal therapy</li> </ul>                       | Lecture / CBL /SDL   |
| 2. Drugs used in dermatological disorders   |                      |
| Discuss drugs used in other dermatological disorders                              |                      |
| • Discuss the uses, mechanism of action, contraindications, precautions, and side | Interactive          |
| effects of topical as well as systemic antifungal drug, Drug used in superficial  | Lecture / CBL /SDL   |
| mycosis   |                      |

Apart from attending daily scheduled sessions, students too should engage in self-study



to ensure that all the objectives are covered

## **LEARNING RESOURCES**

| SUBJECT          | RESOURCES   |
|------------------|---|
| GENERAL MEDICINE | 1. Hutchison's Clinical Methods, 23 <sup>rd</sup> Edition 2. MacLeod's clinical examination 13th edition 3. Davidson's Principles and Practice of Medicine 4. Kumar and Clark's Clinical Medicine |
| PATHOLOGY        | 1. Robbins & Cotran, Pathologic Basis of Disease, 9th edition. 2. Rapid Review Pathology, 4th edition by Edward F. Goljan MD  |
|                  | WEBSITES:  1. http://library.med.utah.edu/WebPath/webpath.html 2. http://www.pathologyatlas.ro/   |
| PHARMACOLOGY     | <ol> <li>Lippincott Illustrated Pharmacology</li> <li>Basic and Clinical Pharmacology by Katzung</li> </ol>   |

#### **ASSESSMENT METHODS:**

- Best Choice Questions(BCQs) also known as MCQs (Multiple Choice Questions)
- Objective Structured Practical/Clinical Examination (OSPE or OSCE)

#### **Internal Evaluation**

- Students will be assessed comprehensively through multiple methods.
- 20% marks of internal evaluation will be added to JSMU final exam. That 20% may include class tests, assignments, practical, and the internal exam which will all have specific marks allocation.

#### **Formative Assessment**

Individual departments may hold quizzes or short answer questions to help students assess their learning. The marks obtained are not included in the internal evaluation

For JSMU Examination Policy, please consult the JSMU website!

More than 75% attendance is needed to sit for the internal and final examinations



## **LNH&MC EXAMINATION RULES & REGULATIONS**

- Students must report to the examination hall/venue, 30 minutes before the exam.
- The exam will begin sharply at the given time.
- No student will be allowed to enter the examination hall after 15 minutes of the scheduled examination time.
- Students must sit according to their roll numbers mentioned on the seats.
- Cell phones are strictly not allowed in the examination hall.
- if any student is found with a cell phone in any mode (silent, switched off, or on)
   he/she will not be allowed to continue their exam.
- No students will be allowed to sit in exams without University Admit Card, LNMC
   College ID Card, and Lab Coats.
- Students must bring the following stationary items for the exam: Pen, Pencil, Eraser, and Sharpener.
- Indiscipline in the exam hall/venue is not acceptable. Students must not
  possess any written material or communicate with their fellow students.

# **SCHEDULE:**

| WEEKS   | 4TH YEAR           | MONTH                      |
|---------|--------------------|----------------------------|
| 2 WEEKS | DERMATOLOGY MODULE | 8 <sup>th</sup> July 2024  |
|         |                    | 20 <sup>th</sup> July 2024 |