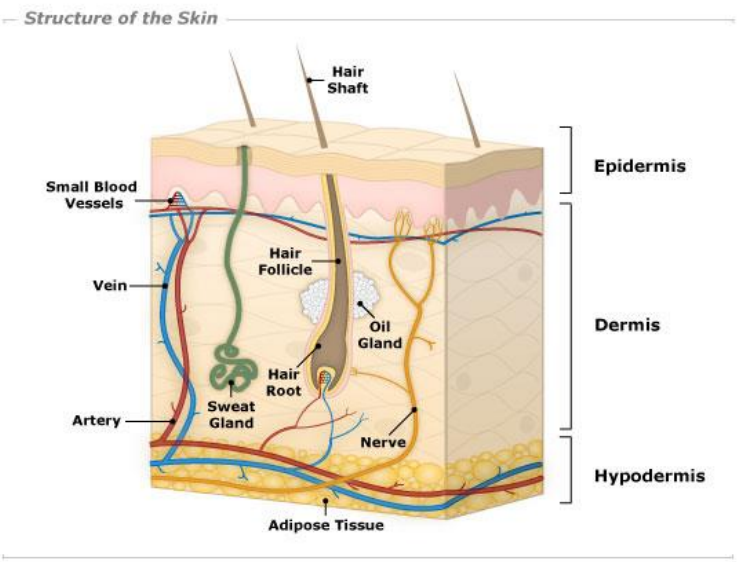


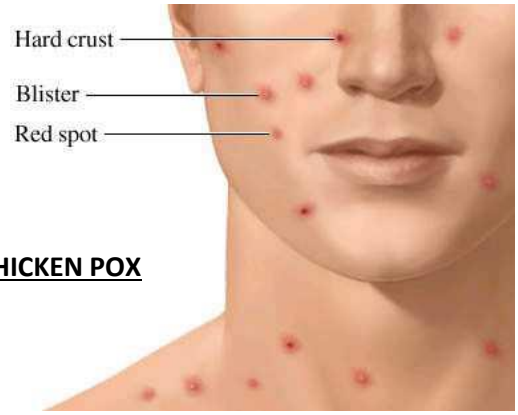
STUDY GUIDE

DERMATOLOGY MODULE

FOURTH YEAR MBBS

13th May – 24th May 2019

Duration: 2 weeks



CHICKEN POX

LIAQUAT NATIONAL HOSPITAL & MEDICAL COLLEGE

STUDY GUIDE FOR DERMATOLOGY MODULE

Module name: **Dermatology**

Year: ***Four*** *Duration:* ***2 weeks (May 2019)***

Timetable hours: **Interactive Lectures, Case-Based Discussion (CBD), Clinical Rotations, Presentations, Demonstrations, Skills, Self-Study**

MODULE INTEGRATED COMMITTEE

MODULE COORDINATOR:	Dr. Shaheen Naveed (Dermatology)
CO-COORDINATORS:	Dr. Sobia Ali (DHCE)

DEPARTMENTS' & RESOURCE PERSONS' FACILITATING LEARNING

BASIC HEALTH SCIENCES	CLINICAL AND ANCILLARY DEPARTMENTS
PATHOLOGY • Professor Naveen Faridi • Dr. Amna Khursheed	***DERMATOLOGY*** • Dr. Shaheen Naveed • Dr. Jaffer Imam
PHARMACOLOGY • Professor Nazir Ahmed Solangi • Professor Tabassum Zehra	***ENDOCRINOLOGY*** • Dr. Ali Asghar
	MEDICINE • Prof. KU Makki • Dr. Syeda Nosheen Zehra

DEPARTMENT of HEALTH PROFESSIONS EDUCATION

- Professor Nighat Huda
- Dr. Sobia Ali
- Dr. Afifa Tabassum
- Dr. M. Suleman Sadiq
- Dr. Mehnaz Umair

LNH&MC MANAGEMENT

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

STUDY GUIDE COMPILED BY:

- Dr. Sobia Ali, Associate Professor, Department of Health Professions Education
- Dr. M. Suleman Sadiq, Lecturer III, Department of Health Professions Education

INTRODUCTION

WHAT IS A STUDY GUIDE?

It is an aid to:

- Inform students how 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 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, web- links, journals, for students to consult in order 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 pertaining to examination policy, rules and regulations.

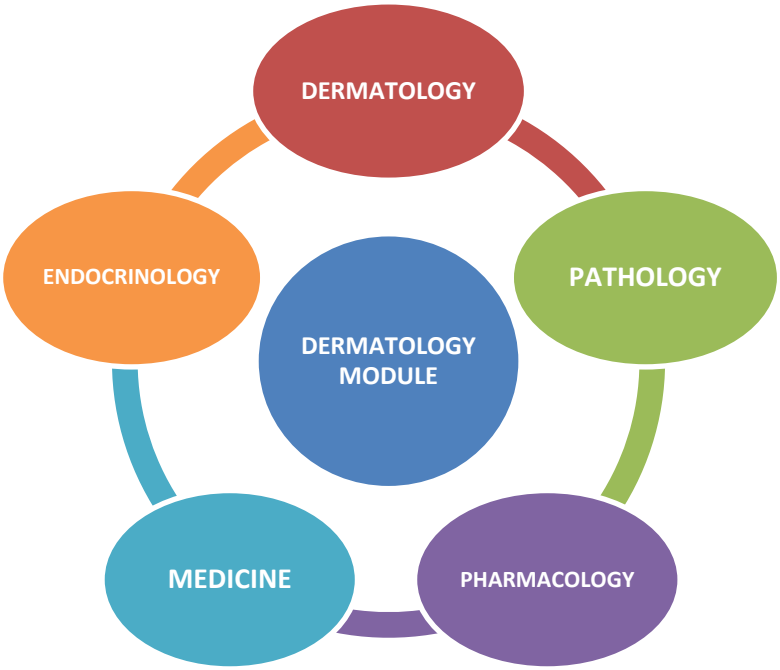
CURRICULUM FRAMEWORK

Students will experience *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 links basic science knowledge to clinical problems. Integrated teaching means that subjects are presented as a meaningful whole. Students will be able to have better understanding of basic sciences when they repeatedly learn in relation to clinical examples.

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

INTERACTIVE LECTURES: In large group, 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 case, interviews or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials and self study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

CASE-BASED DISUCSSION (CBD): A small group discussion format where learning is focused around a series of questions based on a clinical scenario. Students' discuss and answer the questions 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 concern 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 respective module are observed and practiced where applicable in skills laboratory.

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

MODULE 4: DERMATOLOGY

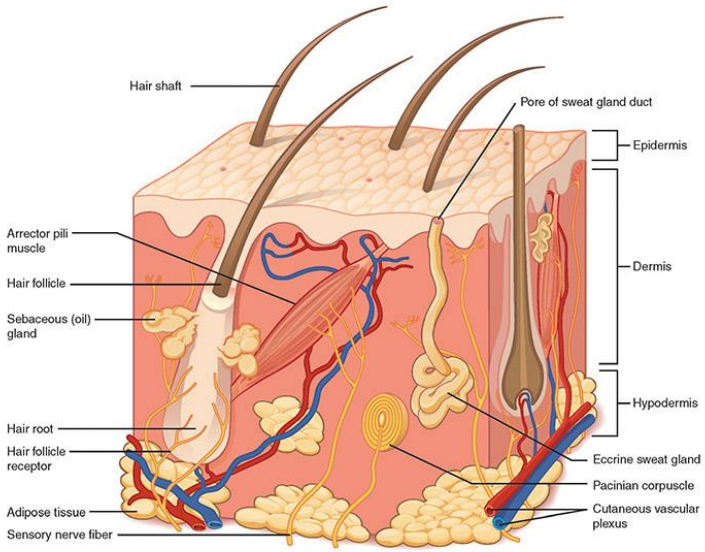
INTRODUCTION

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 weighting 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 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 Dermatology module students should be able to:

OBJECTIVES	TEACHING STRATEGY
DERMATOLOGY	
• Define common terminologies	Interactive Lectures
• Differentiate among various skin lesions when shown photographs/real patients	
• Describe the clinical presentations of common dermatologic conditions listed below: I. Infections: a. Bacterial: Impetigo, Ecthyma, Cellulitis, Foliculitis, Furuncle, Carbuncle, Erysiplas, NecrotisingFascitis b. Viral: Herpes Simplex and Zoster, Chicken Pox, Measles, Viral warts, MolluscumContagiosum c. Fungal: Dermatophyte infections, Candida Albicans, PityrisisVersiclor d. Parasitic: Scabies, Pediculosis, Leishmaniasis II. Psoriasis III. Lichen Planus IV. Cutaneous drugs reactions: Steven Johnson Syndrome, Toxic Epidermal Necrolysis, Erythema Multiformis, Urticaria V. Cutaneous Manifestations of Systemic Diseases: skins changes in SLE, Thyroid disorders, Hepatic disorders.	
• Diagnose common dermatologic conditions listed above based on information provided in writing or by simulated patients	Interactive Lectures
• Justify management plan for the conditions listed above	

• Discuss the clinical presentations, diagnosis and management plan of Eczema	Interactive Lectures
• Discuss the clinical presentations, diagnosis and management plan of Atopic dermatitis	Case-Based Discussion
• Discuss the clinical presentations, diagnosis and management plan for Bullous disorder including Pempigus Vulgaris, Bullous Pemphigoid, Dermatitis Herpetiformis, Epidermolysis Bullosa	
• Discuss the causes, pathogenesis, diagnosis and treatment of acne	Interactive Lectures
• Discuss the causes, pathogenesis, diagnosis and treatment of alopecia (hair fall)	
ENDOCRINOLOGY	
• Describe the clinical presentations of common dermatologic conditions of Diabetes Mellitus	Interactive Lecture
INFECTIOUS DISEASE	
• Describe the clinical presentations of Sexually Transmitted Diseases which include Gonorrhoea, Chancroid, Syphilis, Lymphogranuloma Venerum (LGV), Granuloma Inguinale	Interactive Lecture
MEDICINE	
• Discuss the clinical presentations of common dermatologic conditions related to kidney disorders & malignancies including Para-Neoplastic Syndrome	Small Group Discussion
• List the drugs that can cause drug reactions • Describe the skin manifestation of drug reactions	Interactive Lecture
PATHOLOGY	
<u>Infectious diseases of skin</u> • Discuss common infections of skin including Verrucae (warts), MolluscumContagiosum, Impetigo, superficial fungal infection	Interactive Lectures

Acute and chronic inflammatory dermatoses • Explain the pathogenesis and clinical presentations of various acute & chronic inflammatory dermatoses including Urticaria, Acute Eczematous Dermatitis, Erythema Multiforme Psoriasis, Seborrheic Dermatitis, Lichen Planus	Interactive Lectures
Disorders of pigmentation and vesicular (Bullous) Diseases • Discuss pigmentation disorders including Freckle, Lentigo, Nevi and Melanoma • Describe pathogenesis and clinical features of various blistering disorders of skin	Small Group Discussion
Tumors of dermis and epidermis • Classify tumors of skin and subcutis • Describe important types with pathogenesis, morphology and clinical features of skin tumors (Actinic Keratosis, Squamous Cell Carcinoma, Basal Cell Carcinoma, Dermato-fibroma, dermatofibrosarcoma protuberance)	Interactive Lectures
PHARMACOLOGY	
• Discuss the uses, mechanism of action, contraindication, precautions and side effects of topical as well as systemic antifungal drug	Interactive Lectures
• Discuss drugs used in other dermatological disorders	Case-Based Discussion
• Discuss classification and mechanism of action of oral & topical steroids	Lecture

Apart from attending daily scheduled sessions, students too should engage in self-study to ensure that all the objectives are covered

Case for Week 1

9-months- old baby girl is brought to the skin clinic by her mother, who is concerned about her rash. She told the doctor that it started when she was 3months old. Initially it was observed on her cheeks and chin. Now it effects her extremities. It is intermittent and intensely itchy.

Past history only significant for rhinitis since birth.

She denies any family history of skin rash. Her sister is asthmatic.

On examination, child is sitting comfortably, is attentive, following commands and appropriately interactive.

Vitals are stable. Her skin examination shows ill defined, symmetric, brightly erythematous scaling pink patches on her cheeks, milder on chin and extremities. Diaper area is not involved. Rest of the systemic examination is unremarkable.


1.What is the most likely diagnosis?

2.How do you classify this disease?

3.What is the age related distribution of this type?

4.How would you treat this case?

5.How would you counsel her parents about her disease?

Case for Week 2

A 30-year-old lady presented to a dermatology clinic with painful oral ulcers for last one month.

a- Physical examination showed wide spread erosions of oral mucosa and close examination revealed friable mucous membrane and ill-defined apthaous ulcer. A polycyclic lesion with blistering evident at the margin present over the trunk.

Questions

1. **What are the differential diagnoses?**
2. **What is the diagnosis?**

b- Biopsy of peri-lesion mucosa showed acantholysis. Direct imunoflourence demonstrates an intra epidermal band IgG and c3. Empidermis showed focal collection of eosinophills.

3. **Classify the disease on the basis of level of blisters on histopathological ground.**
4. **What are the complications of this disease?**
5. **How will you manage this patient?**

LEARNING RESOURCES

SUBJECT	*RESOURCES*
GENERAL MEDICINE	**REFERENCE BOOKS:** 1. Hutchison's Clinical Methods, 23rd Edition 2. MacLeod's clinical examination 13th edition 3. Davidson's Principles and Practice of Medicine 4. Kumar and Clark's Clinical Medicine
PATHOLOGY/MICROBIOLOGY	**TEXT BOOKS** 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	1. Lippincot Illustrated Pharmacology 2. Basic and Clinical Pharmacology by Katzung

ADDITIONAL LEARNING RESOURCES

Hands-on Activities/ Practical	Students will be involved in Practical sessions and hands-on activities that link with the Dermatology Module to enhance learning.
Museum	Models available in the museum are a rich learning resource for quick review of anatomy and related educational activities
Skills Lab	Skills acquisition in a simulated environment in the skills lab involving experiential learning will ensure patient safety and will also help to build confidence in approaching the patients
Videos/Podcasts	Videos and podcasts will familiarize the student with the procedures and protocol which they can watch and listen to at any time and wherever they are, as part of task oriented learning
Internet Resources	Students will use easily accessible internet resources with added time flexibility to enrich and update their knowledge and its application

ASSESSMENT METHODS:

Theory:

- **Best Choice Questions (BCQs)** also known as MCQs (Multiple Choice Questions) are used to assess objectives covered in each module.

- A BCQ has a statement or clinical scenario followed by four options (likely answer).
- Students after reading the statement/scenario select ONE, the most appropriate response from the given list of options.
- **Correct answer carries one mark, and incorrect 'zero mark'. There is no negative marking.**
- Students mark their responses on specified computer-based/OMR sheet designed for LNHMC.

OSPE/OSCE: Objective Structured Practical/Clinical Examination:

- Each student will be assessed on the same content and have same time to complete the task.
- Comprise of 12-25 stations.
- Each station may assess a variety of clinical tasks, these tasks may include history taking, physical examination, skills and application of skills and knowledge
- Stations are observed, unobserved, interactive and rest stations.
- Observed and interactive stations will be assessed by internal or external examiners.
- Unobserved will be static stations in which there may be an X-ray, Labs reports, pictures, clinical scenarios with related questions for students to answer.
- Rest station is a station where there is no task given and in this time student can organize his/her thoughts.

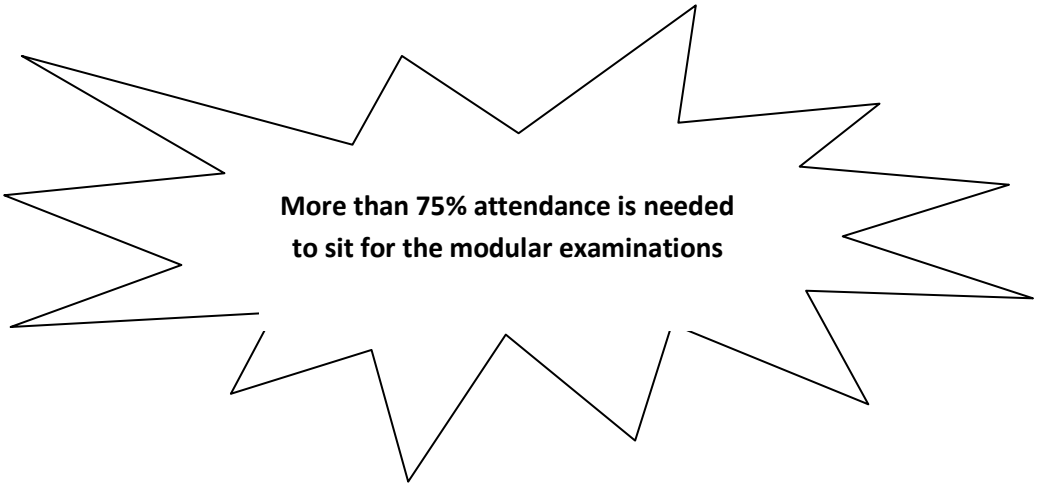
Internal Evaluation

- Students will be assessed to determine achievement of module objectives through the following:
  - **Module Examination:** will be scheduled on completion of each module. The method of examination comprises theory exam which includes BCQs and OSPE (Objective Structured Practical Examination).
  - **Graded Assessment of students by Individual Department**: Quiz, viva, practical, assignment, small group activities such as CBL, TBL, TOL, online assessment, ward activities, examination, and log book.
- Marks of both modular examination and graded assessment will constitute 20% weightage.
- As per JSMU policy, this 20% will be added by JSMU to Final Theory Examination.

Example : Number of Marks allocated for Final Theory and Internal Evaluation			
	Final Examination Theory Marks	**Internal Evaluation (Class test + Assignments + Modular Exam)**	**Total (Theory)**
	80%	20%	100%

Formative Assessment

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



MODULAR EXAMINATION RULES & REGULATIONS (LNH&MC)

- Student must report to examination hall/venue, 30 minutes before the exam.
- **Exam will begin sharp at the given time.**
- No student will be allowed to enter the examination hall after 15 minutes of scheduled examination time.
- Students must sit according to their roll numbers mentioned on the seats.
- **Cell phones are strictly not allowed in examination hall.**
- If any student is found with cell phone in any mode (silent, switched off or on) he/she will be not be allowed to continue their exam.
- No students will be allowed to sit in exam without University Admit Card, LNMC College ID Card and Lab Coat
- Student 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.

JSMU Grading System

- It will be based on GPA – 4 system

Marks obtained in Percentage range	Numerical Grade	Alphabetical Grade
80-100	4.0	**A+**
75-79	4.0	**A**
70-74	3.7	**A-**
67-69	3.3	**B+**
63-66	3.0	**B**
60-62	2.7	**B-**
56-59	2.3	**C+**
50-55	2.0	**C**
<50 Un-grade-able	0	**U**

- A candidate obtaining GPA less than 2.00 (50%) is declared un-graded (fail).
- Cumulative transcript is issued at the end of clearance of **all** modules.

SCHEDULE:

WEEKS	4th Year	MONTH
WEEK 1	OPHTHALMOLOGY/ ENT	1st April 2019
WEEK 2		
WEEK 3		20th April 2019
	MODULAR EXAM	22nd April 2019
WEEK 1	REHABILITATION	23rd April 2019
WEEK 2		4th May 2019
WEEK 1	GENETICS	6th May –11th May 2019
WEEK 1	DERMATOLOGY	13th May 2019*
WEEK 2		24th May 2019*
	DERMATOLOGY, GENETICS & REHABILITATION MODULAR EXAM**	29th May & 30th May 2019*
WEEK 1	NEUROSCIENCES-II & PSYCHIATRY	June 2019*
WEEK 2		
WEEK 3		
WEEK 4		
WEEK 5		
WEEK 6		
WEEK 7		
WEEK 8		Aug 2019*
	MODULAR EXAM	Aug 2019*

*Final dates will be announced later

** There will be combined module exam for Dermatology, Genetics and Rehabilitation modules