



Dermatology Theory Blueprint

Academic Year 2023 - 2024

Fifth Year Dermatology Examination Blueprint

Purpose of the exam

The exam is designed to evaluate the knowledge, diagnostic reasoning, and clinical judgment skills expected of the certified junior doctor in the broad domain of Dermatology. The ability to make appropriate diagnostic and management decisions that have important consequences for patients will be assessed. The exam may require recognition of common clinical problems for which patients may consult a dermatologist.

Exam content

Exam content is determined by a pre-established blueprint, or table of specifications. The blueprint is developed by Department of Medicine – College of Medicine – Al-Nahrain University and is reviewed annually and updated as needed for currency. Recent graduates, trainees, training program directors, and certified practitioners in the discipline are surveyed periodically to provide feedback and inform the blueprinting process.

The primary Dermatology content categories of the blueprint are shown below, with the percentage assigned to each for a typical exam:

Dermatology Content Category	% of Exam
Anatomy and Physiology of the Skin	3%
Diagnosis of skin disorders	3%
Urticaria	5%
Parasitic diseases of the skin	5%
Eczema and Dermatitis 1	4%
Eczema and Dermatitis 2	3%
Sexually transmitted diseases 1	3%
Sexually transmitted diseases 2	3%
Superficial fungal skin infections	5%
Connective tissue diseases	5%
Pigmentary skin diseases	4%
Viral diseases of the skin	5%
Drugs & Drugs reactions	4%
Bacterial diseases of the skin	5%
Lichen planus & Erythema multiforme	5%
Psoriasis	5%
Skin tumours	3%
Acne & related conditions	5%
Hair diseases	5%
Nail disorders	5%
Inherited skin diseases (Genodermatoses)	3%
Bullous diseases	4%
Cutaneous manifestations of systemic diseases	5%
Dermatoses Resulting from Physical Factors	3%
Total	100%

Exam format

The exam is composed of

- A. The Midterm written exam which compromises 25% of the final mark

It is composed of 25 single-best-answer multiple-choice questions

- B. Short Quizzes, essays, and other student-centered activities which compromise 5% of the final mark

- C. The Final written exam which compromises 70% of the final mark

It is composed of up to 70 single-best-answer multiple-choice questions, and 3 Modified – Essay Questions.

Most questions describe patient scenarios and ask about the work done (that is, tasks performed) by physicians during practice:

- Making a diagnosis
- Ordering and interpreting results of tests
- Recommending treatment or other patient care
- Assessing risk, determining prognosis, and applying principles from epidemiologic studies
- Understanding the underlying pathophysiology of disease and basic science knowledge applicable to patient care

In all exams, clinical information presented may include patient photographs, and other media to illustrate relevant patient findings.

The primary medical categories can be expanded for additional detail to show topics that may be covered in the exam. Each primary medical content category is listed below, with the *percentage of the exam* assigned to this content area. Below each major category are subsection topics and their assigned percentages in the exam.

Please note: The percentages below describe content of a *typical* exam and are approximate; actual exam content may vary.

Anatomy and Physiology of the Skin	3 % of Exam
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Physiology (function) of the skin

Anatomy of the three layers of the skin

Cells of epidermis

Basement membrane.

Dermis,

Appendageal skin structures

Diagnosis of skin disorders	3 % of Exam
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- **History & Examination.**

– **Morphology.**

– **Distribution.**

- **Clinical signs.**

- **Diagnostic tests.**

Urticaria:

5 % of Exam

- Introduction.
- Classification & types.
- Pathogenesis.
- Etiological (Provoking) factors.
- Clinical features.
- Investigations.
- Differential diagnoses.
- Treatment of urticaria.
- Treatment of anaphylaxis.
- * Angioedema:
 - Ordinary angioedema.
- * Antihistamines.

Parasitic diseases of the skin

5 % of Exam

I. Protozoal diseases:

- Leishmaniasis (C.L.):
Epidemiology, pathogenesis, histopathology & clinical features.
Clinical types:
Wet (rural) type
Dry (urban) type:
Leishmania recidivans:(chronic lupoid Leishmania)
Diffuse cutaneous leishmaniasis: (disseminated cutaneous leishmaniasis)
Diagnosis.
Treatment.

II. Arthropod infection:

- A. Pediculosis capitis (Head louse).
- B. Pediculosis corporis (Body louse).
- D. Phthirus pubis (Pubic louse).
- E. Epidemiology, clinical presentations, diagnosis and treatment

III. Mite infection(scabies):

Epidemiology, clinical presentation, diagnosis and treatment.

Eczema and Dermatitis 1

4 % of Exam

Introduction & definition of eczema.

- Classification.
- Clinical stages & histopathology.
- Management.
- Contact dermatitis: Introduction, pathogenesis, histopathology, clinical pictures, diagnosis & treatment.
- Infective & infected dermatitis.
- Seborrheic dermatitis:
Pathogenesis, histopathology, clinical pictures, diagnosis,

differential diagnosis & treatment.

- Asteatotic eczema.

Eczema and Dermatitis 2**3 % of Exam**

Atopic dermatitis: Etiology & pathogenesis, histopathology, clinical types and pictures, complications, diagnosis & treatment.

- Discoid eczema.
- Lichen simplex chronicus.
- Pompholyx.
- Gravitational eczema:
Pathogenesis, clinical pictures & Treatment.

Sexually transmitted diseases (STD) 1:**3 % of Exam**

Risk factors.

- Presentations.
- Urethritis & cervicitis.
- Gonorrhoea: Clinical features, extra-genital infection & complications.
- Non – gonococcal urethritis (NGU)
- Genital ulcers

Sexually transmitted diseases (STD) 2**3 % of Exam**

Syphilis:

- Mode of transmission, stages, pathogenesis & clinical features.
- Primary syphilis (chancre).
- Secondary syphilis.
- Latent syphilis.
- Tertiary syphilis.
- Congenital syphilis.
- * Diagnosis.
- * Differential diagnosis.
- * Treatment.
- * Follow up.
- * Prevention & Control.

Superficial fungal skin infection**5 % of Exam**

Dermatophytosis: (tinea or ringworm infection):

Clinical types.

Dermatophytid (Id reaction).

Diagnosis.

Treatment.

Pityriasis versicolor:

Etiology.

Clinical features.

Diagnosis

Treatment.

Candidiasis (Moniliasis):

Risk factors.

Laboratory diagnosis.

Clinical types.

Treatment.

Connective tissue diseases	5 % of Exam
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Lupus erythematosus LE:

- **Systemic lupus erythematosus (SLE):**

Etiology & pathogenesis.

Clinical manifestations.

Lab. Exam.

Diagnostic criteria of SLE.

- **Subacute cutaneous lupus erythematosus SCLE.**

- **Chronic cutaneous lupus erythematosus CCLE.**

* **Dermatomyositis DM.**

* **Scleroderma (systemic sclerosis).**

Pigmentary skin diseases	4 % of Exam
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- **Synthesis of melanin. - Melanogenesis.**

- **Classification of pigmentary disorders.**

Hypopigmentation

- **Vitiligo:**

Definition, epidemiology, pathogenesis, clinical features, histopathological findings, diagnosis, differential diagnosis& treatment.

- **Post inflammatory Hypopigmentation.**

- **Pityriasis alba.**

- **Idiopathic guttate**

Hypomelanosis.

- **Steroid leukoderma.**

- **Albinism.**

Hyperpigmentation:

- **Melasma.**

- **Post inflammatory Hyperpigmentation.**

- **Genetic conditions:**

a- **Becker nevus**

b- **café- au lait macule**

c- **Freckles (ephelides**

d- **Lentigo**

e- **Xerodermapigmentosa**

- **Endocrine causes for hyperpigmentation.**

- **Metabolic causes.**

- Nutritional causes.
- Drugs.
- Tumors. - Malignancy-associated

acanthosis nigricans

Viral diseases of the skin	5 % of Exam
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Introduction.

- Triggering factors.
- *Herpes virus:
 - Herpes simplex: orolabial, genital and others types.
 - Chicken pox & shingles.
- *Human papilloma virus: Warts.
- *Pox virus: Molluscum contagiosum, Orf & milker's nodules.
- *Pityriasis rosea: Clinical pictures, differential diagnosis & treatment

Drugs & Drugs reactions	4 % of Exam
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- WHO definition of adverse drug reactions.
- Classification of adverse drug reactions.
- Risk factors for adverse drug reactions.
- Classification.
- Onset.
- Severity.
- Type.
- Mechanisms of drug reactions.
- Immunological reactions.
- Non immunologically- mediated reactions.
- Clinical types of drug eruptions.
- Diagnosis.
- Investigations.
- Treatment.
- Corticosteroids.

Bacterial diseases of the skin	5 % of Exam
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Clinical types:

- Impetigo: Bullous & non bullous.
- Ecthyema.
- Folliculitis: Superficial & deep.
- Pseudofolliculitis.
- Boil (Furuncle).
- Carbuncle.
- Hidradenitis suppurativa.
- Erysipelas and Cellulitis.
- Erythrasma.

Lichen planus & Erythema multiforme**5 % of Exam****Lichen planus:**

- Introduction.
- Pathogenesis.
- Histopathology.
- Immune fluorescent test.
- Clinical features.
- Differential diagnoses.
- Clinical variants.
- Treatment.

***Erythema multiforme:**

- Etiology.
- Histopathology.
- Clinical features.
- Clinical forms.
- Differential diagnoses.
- Treatment.

Psoriasis**5 % of Exam****Definition.**

- Etiology.
- Pathogenesis.
- Histopathology.
- Provoking and exacerbating factors.
- Clinical features.
- Clinical variants.
- Differential diagnosis.
- Treatment: Local, scalp treatment, phototherapy (including PUVA in details) and systemic treatments.
- Erythroderma.

Skin tumours**3 % of Exam****Classification.**

- Benign tumours.
- Pre - malignant conditions.
- Malignant tumours.
- Etiology.
- Differential diagnosis.
- Treatment.

Acne & related conditions**5 % of Exam****Introduction.**

- Factors affect acne.
- Pathogenesis.
- Clinical features.
- Complications.
- Treatment.
- Sever forms of acne.
- Other variants of acne.
- * Rosacea:
 - Introduction.
 - Etiology & exacerbating factors.

- Clinical features.
- Complications.
- Differential diagnosis.
- Treatment.
- * Peri - oral dermatitis.

Hair diseases	5 % of Exam
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Hair cycle.

- Hair types.
- Causes of hair loss.
- Alopecia areata.
- Androgenetic alopecia (male & female types).
- Telogen effluvium.

Hirsutism.

Nail disorders	5 % of Exam
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Nail disorders associated with skin diseases.

- *Acquired nail disorders.
- *Traumatic nail disorders.
- *The nail and internal diseases.
- *Nail discoloration.
- *Tumours of the nail (Tumours under or adjacent to the nail).
- *Developmental nail anomalies.

Inherited skin diseases (Genodermatoses)	3 % of Exam
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Disorders of keratinization:

- Ichthyosis vulgaris.
- X- linked ichthyosis.
- Collodion baby.
- Acquired ichthyosis.
- * Neurocutaneous disorders:
- Neurofibromatosis (Von Recklinghausen dis.):
- Diagnostic criteria for NF 1
- Tuberous sclerosis (epiloia)
- * Xeroderma pigmentosa

Bullous diseases	4 % of Exam
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Causes.

- Types.
- Pemphigus.
- Bullous pemphigoid (BP).
- Dermatitis herpetiformis (DH).
- Hereditary epidermolysis bullosa.
- Etiology & pathogenesis.
- Clinical features.
- Lab. exam.
- Treatment.

Cutaneous manifestations of systemic diseases	5 % of Exam
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Xanthoma and hyperlipidemia:

- Introduction & types of hyperlipidemias.
- Clinical types, histology & treatment of xanthoma .
- *Diabetes mellitus.
- *Endocrine disorders.
- *Nutritional problems.
- * Liver diseases.
- *Chronic renal failure.
- *GIT problems.
- *Pyoderma gangrenosum.
- *Behcet's disease.

Dermatoses Resulting from Physical Factors	3 % of Exam
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- Heat Injuries: Burns. Miliaria.
- Cold Injuries: Chilblains. Frostbite. Trench Foot. Livedo reticularis. Raynaud's disease and Phenomenon.
- Dermatoses with Cold hypersensitivity.
- Actinic injuries: Photosensitivity and photosensitive disorders.
- Sunscreens:
- Photosensitive disorders: Chemically induced photosensitivity. Metabolic disorders. Light exacerbated skin disorders.
- Idiopathic photosensitive disorders:
- Mechanical injuries

Each exam will cover all the indicated clinical tasks in the approximate percentages

Clinical Task	<ul style="list-style-type: none"> • Pathophysiology • Etiology • Basic Knowledge • Epidemiology • Prognosis • Risk Factors 	<ul style="list-style-type: none"> • Making Diagnosis • Evaluating symptoms and Signs 	<ul style="list-style-type: none"> • Ordering Investigations • Interpreting Investigations 	<ul style="list-style-type: none"> • Recommending Treatment • Evaluating treatment
	20 %	30%	30 %	20%

Questions will cover the following level of competences in the approximate percentages

Level of Competence	Recall of Knowledge	Application of Knowledge	Problem solving
	40%	35%	25 %