PROGRAMME SPECIFICATION

MD Dermatology

Faculty of Medicine- Mansoura University

(A) Administrative information:

(1) Programme Title & Code	Postgraduate degree of dermatology Code DERM 600
(2) Final award/degree	MD
(3) Department (s)	Dermatology , Andrology , and STDs
(4) Coordinator	Prof. Ahmed Abd Elkhabeer, MD
(5) External evaluator (s)	Mai H Elsamahy, MD Professor of Dermatology, STDs and Andrology, Faculty of Medicine Ain Shams University
(6) Date of approval by the Department`s council	3/4/2016
(7) Date of last approval by the faculty`s council	9/8/2016

(B) Professional information:

(1) Programme Aims:

The broad aims of the Programme are as follows:

1- Provides the MD student with knowledge about basic science related to Dermatology.

2- Provides the student with detailed and advanced knowledge about most of skin diseases probably seen by a skin MD specialist

3- Provides MD students with detailed dermatology clinical skills such as obtaining a patient's full history, full clinical examination of skin, hair and nails.

4- Makes the MD student be able to differentiate between similar skin diseases after making an appropriate differential diagnosis.

5- Makes the student the MD student should be able to perform certain diagnostic and therapeutic procedures for cases of skin diseases like skin biopsy, woods light examination, dermoscopy, immunofluorescence and 6zank smear.

7- Makes the MD student be able to plan a standard diagnostic algorism for skin diseases

8- Makes the MD student be able to propose treatment strategies for cases of skin diseases

9- Makes the MD student be able to perform certain treatment procedures for the skin like puch micrograft, split thickness graft, light therapy, derbabrassion, cry and electrocautery, excision of some skin lesions chemical peel, and laser therapy, Botox and filler injections.

10- Provides the MD student with an ethical attitude in general and towards patients, relatives, seniors, tutors and colleagues.

11- Makes the MD student be able to adopt a scientific way of thinking even in the presence of administrative or logistic limitations.

12- Makes the MD student be able to recognize the importance of scientific research and how to conduct a community service

13- Makes the MD student be able to develop a point for clinical trial and to lead a research team.

14- Provides the student with advanced knowledge about Lasers.

15- Provides the student with advanced knowledge about skin surgery.

16-Provides the student with advanced knowledge in the field of dermatopathology.

17-Provides the student with the ability to plan a standard diagnostic algorism for skin diseases.

(2) Intended Learning Outcomes (ILOs):

On successful completion of the programme, the candidate will be able to:

A-Knowledge and Understanding:

A 1- Recognize the following:

a) Porphyrin metabolism.
b) Oxidative stress & antioxidants.
c) Biochemistry of trace elements & vitamins.

A 2- Describe Structure and function of DNA, its replication, repair and recombination.

A 3- Identify Cytoskeleton & Cell junctions and their disorders in Dermatology

A 4- Discuss Molecular structure & its disorders in Dermatology of the following:

a) basement membrane zone
b) collagen
c) elastin
d) Ground substance.

A 5- Recognize the Molecular biology of following:

a) stem cells
b) skin tumors
c) skin infections

A 6- Explain Principles of biotechnology and transdermal delivery of drugs.

A 7- Recognize the following:

a) Tissue engineering in Dermatology
b) Recombinant DNA technology and genetic engineering
c) Cloning.

A 8- Recognize the following:

d) Basics of cells.
e) Cell membrane structure & dynamics.
f) Biology of skin ageing.
g) Principles of genetics.
h) Genomics, proteomics & bioinformatics.

A 9- Describe the following & their disorders in Dermatology:

e) Cell movements
f) Cell cycle
g) Cell divisions.

A 10- Discuss the biology of:

a) Keratinocyte
b) Hair follicle
c) Melanocyte

A 11- Identify the following:

a) Cell signaling & ion channels.
b) Skin barrier.
c) Cell biology of wound healing.

d) Apoptosis.

A 12- Explain the following:

a) Structure & function of genes and chromosomes.
b) Transcription & control of gene expression.
c) Genetics of skin diseases
d) Gene therapy & its role in dermatology
e) Genetic counseling in Dermatology

A 13- Recognize the Micro flora of skin.

A 14- Discuss Bacterial, Viral, Fungal, Protozoal and Parasitic skin infections and their Immunology.

A 15- Identify the Innate immunity & adaptive immunity: Soluble factors, Cells of innate immunity, T & B lymphocytes.

A 16- Recognize the Immunological functions of the skin: Keratinocytes, Langerhans's cell, Epidermal T cells, Antimicrobial peptides, Toll-like receptors

A 17- Describe Cytokines & cell adhesion molecules in Dermatology

A 18- Explain the Allergy (hypersensitivity) and its immunotherapy, Immunodeficiency and Autoimmunity.

A 19- Discuss Immunology of skin tumors, Photo-immunology and Immunotherapy (Immunomodulatory drugs & Biologic therapy).

A 20- Recognize of the Characters of normal skin.

A 21- Define the Clinicopathological correlations in diagnosis of the following:

1. Genodermatoses.
2. Non-infectious erythematous squamous diseases.
3. Vasculitis.
4. Vesiculobullous diseases.

5. Connective Tissue diseases.
6. Photosensitive dermatoses.
7. Non-infectious granuloma.
8. Degenerative diseases.
9. Perforating dermatoses.
10. Histeocytic proliferative disorders.
11. Inflammatory diseases of hair follicles and sweat glands.
12. Bacterial, viral, fungal, protozoal infections of the skin.
13. Pigmented disorders of the skin.
14. Epidermal skin tumors (BCC, SCC, Melanoma).
15. Tumors of skin appendages.
16. Cutaneous lymphoma & leukemia.
17. Tumors of fibrous tissues.
18. Tumors of vascular tissues.

A 22- Recognize the etiology, pathogenesis, clinical features, investigations, differential diagnosis, complications and treatment of skin diseases.

A 23- Identify pathogenesis, diagnosis, prevention and treatment of Sexually transmitted diseases.

A 24- Outline the relations between the systemic diseases & the skin and the ages of man & their dermatoses.

A 25- Explain the different diagnostic tests to be used in identification of most skin diseases including the prenatal diagnosis of skin diseases.

A 26- Discuss the lines of treatment of skin diseases including topical and systemic therapy, phototherapy, and basics of dermatological surgery & Laser therapy.

A 27- Discuss and Understand Lasers, Lights, and Tissue interactions.

A 28- Recognize Laser Treatment of

- Vascular Lesions
- Pigmented Lesions and Tattoos.
- Excess Hair
- Ethnic Skin.

A 29- Identify Non-Surgical Body contouring and Skin Tightening.

A 30- Describe Non-ablative Laser and Non-ablative Factional Laser Rejuvenation.

A 31- Explain Light Skin Rejuvenation and Laser Resurfacing

A 32- Know the Complications and Legal Considerations of Laser and Light Treatments

A 33- Identify the following:

- epidermis
- Dermis
- Fat and the Subcutaneous Layer.

A 34- Explain Immunology and Nutrition and of the skin

A35- Recognize Aging skin regarding Hormones, Photoaging and Cigarettes

A 36- Describe the following:

- Baumann skin typing system
- Oily skin
- Dry skin
- Sensitive skin.
- Skin of color
- Chemical peels
- Botulinum Toxin
- Lasers and light Devices.
- Platelet rich plasma.

A 37- Discuss the following:

- Sunscreens,
- Retinoids
- Moisturizing
- Antioxidants.
- Burn.

A 38- Outline Histopathology of normal skin and diagnostic procedures in skin diseases.

A 39- Explain different types of Skin granulomas

A 40- Discuss the histopathology of different groups of dermatoses (Psoriasiform, Lichenoid, Spongiotic, Neutrophilic, Eosinophilic, and Vesiculobullous)

A 41- Recognize different types of skin tumors [Epidermal skin tumors, Tumors of skin appendages, Lymphoma and related disorders, and Soft tissue tumors (vascular, fibrous, subcutaneous fat, nerves, and muscles)].

B-Intellectual skills :

B1- Illustrate the following:

a) steps of Porphyrin metabolism

b) Cell junctions and their disorders in Dermatology

B2- Compare between types of antioxidants

B3- Compare between types of:

1. Cell movements
2. Cell junctions.

B-4- Plan standard diagnostic algorisms for micobiological diagnosis of Bacterial, Viral, Fungal, Protozoal and Parasitic skin infections.

B5- Compare between Innate immunity & adaptive immunity

B-6- Plan a standard diagnostic algorism for histopathological diagnosis of different skin diseases

B-7- Assimilate evidence from scientific research and bring it into his clinical practice

B 8- Manage administrative versus scientific conflicts in an appropriate way.

B 9- Compare between what is common and what is remote or extreme.

B 10-Interpret clinical data on approaching cases of skin diseases.

B 11- Summarize the appropriate tests to diagnose a case of skin diseases

B 12- Integrate formative evaluation into daily practice

B 13- Analyze data obtained from history, clinical examination and laboratory reports to approach cases of skin diseases.

B 14- Prioritize the different patient's problem and Set up an appropriate algorism.

B 15- Propose good and interesting points for clinical studies in the field.

B 16- Lead a scientific research teem

B 17- Plan a safe treatment strategy after discussion with the patient or a relative.

B-18-Compare between different types of lasers used for hair removal

B 19- Set up an algorithm for indications of different types of lasers according to skin phototypes.

B-20- Differentiate between types of skin.

B 21- Compare between different procedures of treatment of certain skin problems e.g aging & pigmentation**.**

B22- Compare between characteristic features of different groups of dermatoses (Psoriasiform, Lichenoid, Spongiotic, Neutrophilic, Eosinophilic, and Vesiculobullous)

B23- Differentiate between characteristic features of different types of Skin granulomas.

B24- Plan a standard diagnostic dermatopathologic algorism for skin diseases

C-Professional/practical skills :

C 1- Construct and record a detailed and structured dermatology history sheet.

C 2-Utilize most of the information obtained from history, clinical examination, and laboratory investigations.

C 3- Conduct a standard skin, hair, and nail examination.

C 4- Practice some therapeutic modalities for skin problems, like intralesional injections electro, cryotherapy, UV therapy, dermabrasion and LASER treatments, chemical peeling, fillers and Botox injections

C 5- Advocate for quality and optimal patient care.

C6- Apply data from literature into the specialty.

D-Communication & Transferable skills:

D 1- Work effectively within the team of colleagues and tutors.

D 2- Manages time, services and resources effectively.

D 3- Sets priorities, skills and needs for lifelong learning.

D 4- Deal professionally with scientific organizations, journals, and associations.

D 5- Explain to the patients and/or relatives the nature of the disease.

D 6- Presents information clearly in different, written, oral or electronic forms.

D 7- Interact effectively with dermatology patients, their families and the public respecting their socioeconomic and cultural backgrounds.

D 8- Value the patient's concerns and worries.

D 9- Respect patients' privacy and autonomy.

D 10- Interact effectively with team work, other physicians & other health care providers.

(3) Academic standards:

Academic standards for the programme are attached in Appendix I. in which **NARS** issued by the National Authority for Quality Assurance & Accreditation in Education are used. External reference points/Benchmarks are attached in Appendix II.

3.a- External reference points/benchmarks are selected to confirm the appropriateness of the objectives, ILOs and structure of assessment of the programme:

Boston university medical college

(www.bnmc.bu.edu/derm/training/programs/overview)

3.b- Comparison of the specification to the selected external reference/ benchmark:

1-They teach only dermatology and not andrology to their postgraduate students

2- Melanoma skin cancers are studied extensively

3- Education resources includes web based curriculum

4- Assessment tools include daily faculty observation of clinical activities, participation in student conferences

(4) Curriculum structure and contents:

Programme Structure and Requirements for the Award:

4.a- Duration of the Programme (the minimum):

- **3 years (6 semesters)**
- **Each semester is 15 weeks teaching in 6 months**
- **Total credit hours requirements: 60 credit hour.**

4.b- Parts of the Programme:

□ **First part**

□ **Second part**

□ **Dissertation**

●4.c- Number of credit hours:

-First part: **5**

-Second part: **25**

-Thesis: **15**

-Log Book: **15**

(5) Programme courses:

First Part

A- Duration: one semester

B- Number of credit hours: 5 hours.

C- The Compulsory Courses (4 courses):

Compulsory Courses	Department(s) responsible for teaching this course
Related Biochemistry& molecular Biology	Biochemistry and Dermatology departments
Related Cell biology & Genetics	Dermatology department
Related Microbiology & immunodermatology	Microbiology and Dermatology departments
Related Dermatopathology	Pathology and Dermatology departments

D- Advanced studies in medical field:

Research methodology, medical statestics, and uses of computer in medical siences.

E- Time Table for the Courses:

Course Title (CODE)	NO. of hours per week	Total teaching hours (15 weeks)	Programme ILOs covered (REFERRING TO MATRIX)
	Lectures		
Related Biochemistry & Molecular Biology	1	15h	A1-7, B1,2, D1-4

(DERM 615 BM)			
Related Cell biology & Genetics (DERM 615)	1	15h	A8-12, B1,2, D1-4
Related Microbiology & immunodermatology (DERM 615 CB)	1	15h	A13-19, B1,2, D1-4
Related Dermatopathology (DERM 605)	2	30 h	A20,21, B1,2,3, D1-4

MD Thesis

- **Protocol of the thesis is registered with the start of the 2nd semester.**
- **Duration of thesis is 4 semesters (2nd, 3rd, 4th, and 5th semesters) (24 months).**
- **Number of credit hours: 15 hours.**
- **Thesis must be discussed before the final MD exam.**

Second Part

- **Duration of second part is 4 semesters starts from the 3rd semester (3rd, 4th, 5th, and 6th semesters) (24 months).**
- **Department responsible for teaching these courses: Dermatology department**
- **Number of credit hours: 40 hours as follow:**
    - **Compulsory Course Dermatology and Therapy: 22 hours.**
    - **Elective Course : 3 hours**
    - **Log book (including different activities and clinical training courses): 15 hours.**

- Time Table for the Compulsory Course:

Course Title	NO. of teaching hours	Total	Programme ILOs

(CODE)	Theoretical Lectures & seminars	Clinical training & Laboratory		teaching hours	covered (REFERRING TO MATRIX)
Dermatology and therapy (DERM 615 DMT)	255	150		405	A22-25 and B1-11 and C1-6 and D1-10

- Time Table for the Elective Courses

- **It will be in the last semester.**
- **The candidate select only one course**

Course Title (CODE)	NO. of teaching hours Theoretical Lectures & seminars	Total teaching hours	Programme ILOs covered (REFERRING TO MATRIX)
Advanced course in Laser (DERM 615 L)	45	45	A26-31, B1,2, D1-4
Advanced course in Skin Surgery (DERM 615 SS)	45	45	A32-36, B1,2, D1-4
Advanced course in Dermatopathology (DERM 615 ADP)	45	45	A37-40, B1,2, D1-4

Programme-Courses ILOs Matrix

P.S. All courses` specifications are attached in Appendix III.

Course Title	Programme ILOs																									
	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20	A21	B1	B2	D1	D2	D3	D4
Related Biochemistry & molecular Biology	x	x	x	x	x	x	x															x	x	x	x	x	x
Related Cell biology & Genetics								x	x	x	x	x										x	x	x	x	x	x
Related Microbiology & immunodermatology													x	x	x	x	x	x	x			x	x	x	x	x	x
Related Dermatopathology																				x	x	x	x	x	x	x	x

Course Title	**Programme ILOs**														
	A 22	**A 23**	**A 24**	**A 25**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**B8**	**B9**	**B10**	**B11**
Dermatology and therapy	**x**	**x**	**x**	**X**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**

Course Title	**Programme ILOs**															
	C1	**C2**	**C3**	**C4**	**C5**	**C6**	**D1**	**D2**	**D3**	**D4**	**D5**	**D6**	**D7**	**D8**	**D9**	**D10**
Dermatology and therapy	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**

Course Title/Code	Programme ILOs																				
	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40	B1	B2	D1	D2	D3	D4
Advanced course in Laser (DERM 615 L)	x	x	x	x	x	x										x	x	x	x	x	x
Advanced course in Skin Surgery (DERM 615 SS)							x	x	x	x	x					x	x	x	x	x	x
Advanced course in Dermatopathology (DERM 615 DP)												x	x	x	x	x	x	x	x	x	x

(6) Programme admission requirements:

- **General requirements:**

According to the faculty rules and by laws

(7) Regulations for progression and programme completion:

First part

Assessment Rules

1- Attendance Criteria:

Minimum acceptance attendance in each course is 75%

2- Assessment tools:

a. Biochemistry and molecular biology:

MCQ Exam at the end of the semester

Final Written exam Assessment after 6 months

Percentage of each Assessment to the total mark:

MCQ Exam 20 % = 20 marks.

Final Written exam 80% = 80 marks.

Other assessment without marks: Creativity, managing conflicts, discipline, working according to the appropriate rules and successful team work with his colleagues and seniors.

b. Microbiology and Immune dermatology:

MCQ Exam at the end of the semester

Final Written exam Assessment after 6 months

Percentage of each Assessment to the total mark:

MCQ Exam 20 % = 20 marks.

Final Written exam 80% = 80 marks.

Other assessment without marks: Creativity, managing conflicts, discipline, working according to the appropriate rules and successful team work with his colleagues and seniors.

c. Cell biology and genetics:

MCQ Exam at the end of the semester

Final Written exam Assessment after 6 months

Percentage of each Assessment to the total mark:

MCQ Exam 20 % = 20 marks.

Final Written exam 80% = 80 marks.

Other assessment without marks: Creativity, managing conflicts, discipline, working according to the appropriate rules and successful team work with his colleagues and seniors.

d. Dermatopathology:

MCQ Exam at the end of the semester

Final Written exam Assessment after 6 months

Percentage of each Assessment to the total mark:

MCQ Exam: 20% = 40 marks

Final Written exam: 80 % = 160 marks

Other assessment without marks: Creativity, managing conflicts, discipline, working according to the appropriate rules and successful team work with his colleagues and seniors.

Second part

Assessment Rules

1- Attendance Criteria:

Minimum acceptance attendance in each course is 75%

2- Log book should be fulfilled and signed by Head of the Dermatology & Andrology department.

3- Assessment tool:

a. Dermatology and Therapy (compulsory course):

- MCQ Exam at the end of each semester each exam of 20 marks (totally= 80 marks).
- Final Assessment after 4 semesters (24 months) includes:
  - 2 Written exams each of 160 marks (totally= 320 marks)
  - Case commentary = 100 marks
  - Oral OSCE exam= 200 marks
  - Clinical OSCE exam = 200 marks
- Other assessment without marks: Creativity, managing conflicts, discipline, working according to the appropriate rules and successful team work with his colleagues and seniors.

b. Elective course:

- MCQ Exam at the end of the semester
- Final Written exam Assessment

Percentage of each Assessment to the total mark:

- MCQ Exam 20 % = 20 marks.
- Final Written exam 80% = 80 marks.
- Other assessment without marks: Creativity, managing conflicts, discipline, working according to the appropriate rules and successful team work with his colleagues and seniors.

(8) Evaluation of Programme's intended learning outcomes (ILOs):

Evaluator	Tools*	Sample size
Internal evaluator **(s):** Prof. Fawzia Saafan, MD Prof. Noura Darwish, MD Prof. Hanan Salem, MD	Personal communications Interviews Emails	
External Evaluator **(s)** **Mai H Elsamahy, MD** **Professor of Dermatology, STDs and Andrology,** **Faculty of Medicine Ain Shams University**	Workshops Interviews Personal communications	
Senior student **(s)**		
Alumni		

Stakeholder **(s)**		
others		

* TOOLS= QUESTIONNAIRE, INTERVIEW, WORKSHOP, COMMUNICATION, E_MAIL

P.S. The programme specification should have attached to it all courses specifications for all courses listed in the matrix.

Programme Coordinator:

Prof Ahmed Abd Elkhabeer, MD

Chairman of the department:

Prof. Ibraheem Abu-Bakr Abdel Hamid, MD

Date: 3/4/2016