



## Andrology &STDs COURSE SPECIFICATION

### MSc Dermatology, Andrology &STDs

#### Faculty of Medicine- Mansoura University (A)

#### Administrative information

(1) Programme offering the course:	MSc Dermatology, Andrology & STDs
(2) Department offering the programme:	Dermatology, Andrology & STDs
(3) Department responsible for teaching the course:	Dermatology, Andrology & STDs
(4) Part of the programme:	Third semester
(5) Date of approval by the Department's council	9/4/2023
(6) Date of last approval of programme specification by Faculty council	18/4/2023
(7) Course title:	<b>Andrology part II</b>
(8) Course code:	<b>DERM 515 AN II</b>
(9) Number of credit hours	3
(10) Total teaching hours:	45

#### **B) Professional information**

#### **(1) Course Aims: (B) Professional information**

##### **(1) Course Aims:**

The broad aims of the course are as follows:

- 1- The MSc student will acquire detailed knowledge about most cases of erectile dysfunction (ED), male infertility and STDs.

- 2- Provides M S c students with detailed Androlog y clinical skills such as obtaining a patient's full history and full clinical examination of male urethra and g enital system.
- 3- T rains the candidate how to classify the different causes of E D male infertility and S T D s and make an appropriate differential diag nosis.
- 4- T rains the candidate how to Perform certain diag nostic tests like microscopic examination of semen and prostatic fluid, taking expressed prostatic secretions, urethral swabs, two g lasses testing , looking for pus cells in urine and semen, testicular biopsy, intracavernosal injection (IC I), R ig iscan monitoring of penile erections, and D oppler exam for varicocele
- 5- T rains the candidate how to do certain therapeutic procedures like: correction of priapism, testicular sperm extraction (TESE) and percutaneous sperm aspiration (PE S A)
- 6- Trains the candidate how to plan a standard diagnostic algorism for cases of urethral discharge
- 7- T rains the candidate how to propose treatment strateg ies for most cases E D male infertility and S T D s.
- 8- T rains the candidate to acquire an ethical attitude in g eneral and towards patients, relatives, seniors, tutors and colleag ues.
- 9- T rains the candidate how to consider the importance of scientific research and community service

## **(2) Intended Learning Outcomes (ILOs):**

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

### **A- Knowledge and Understanding**

- A1- R ecog nize Physiolog y of T esticular F unction, S perm M aturation and F ertilization.

A2- Outline the Classification of Andrological Disorders A3- Explain techniques, results and indications of different diagnostic methods:

1. Imaging Diagnostics
2. Endocrine Laboratory Diagnosis.
3. Cytogenetic and Molecular Genetic Investigations.
4. Semen Analysis.
5. Sperm Quality and Function Tests
6. Testicular Biopsy and Histology.

A4- Describe Normal and Abnormal pubertal development. A5- Explain the etiology, pathogenesis, diagnosis, differential diagnosis and management of Diseases of the Hypothalamus and the Pituitary Gland.

A6- Discuss etiology, pathogenesis, diagnosis, differential diagnosis and management of Disorders affecting male fertility at the Testicular Level.

A7- Explain etiology, pathogenesis, diagnosis, differential diagnosis and management of Disorders affecting male fertility at the level of Androgen Target Organs. A8- Outline etiology, pathogenesis, diagnosis, differential diagnosis and management of the Diseases of the Seminal Ducts.

A9- Describe Testicular Dysfunction in Systemic Diseases and Iatrogenic factors and effect of STDs on male infertility.

A10- Describe different types of treatment of male infertility A11- Identify Male contribution to contraception. A12- Recognize etiology, pathogenesis, diagnosis, differential diagnosis and management of Andrological emergencies.

A13- Explain the Psychology and physiology of sexual desire, arousal and response regarding the following subjects:

- a. Central nervous mechanisms
- b. Role of hormones
- c. Genital responses
- d. Orgasm, emission and ejaculation

A14- Describe Ageing and Sexuality regarding :

- a. The effect of physiological, psychological and social factors throughout life
- b. Changes in sexuality throughout life A15- Recognize Sexual Dysfunctions in men and women regarding :
  - a. Definitions and classification
  - b. Epidemiology, pathophysiology and risk factors
  - c. Differentiation between sexual dysfunction and short term, or transient, alterations of sexual function.
  - d. Diagnosis and treatment of sexual dysfunctions.

A16- Identify the etiology, pathogenesis, diagnosis, differential diagnosis and management of deviant sexual behaviour.

A17- Outline different Gender Identity Disorders. A 18- Recognize the clinical management of sexual disorders regarding:

1. Principles
  - i. Evidence based medicine
  - ii. Combination of psychosomatic and somato-medical approach
  - iii. Interdisciplinarity
  - iv. Patient and couple centered
2. Methods
  - i. Establishing a sexual medicine clinic
  - ii. Counselling, Sex therapy, Psychotherapy
  - iii. Pharmacological
  - iv. Physical and surgical-

### **Intellectual skills**

- B 1- Interpret clinical data on approaching different andrology cases.
- B 2- Summarize the appropriate tests to diagnose a case with andrologic problem.
- B 3- Analyze data obtained from history, clinical examination and laboratory reports to approach andrology cases management.
- B 4- Prioritize the different patient's problem and Set up an appropriate algorithm for these problems management.
- B 5- Plan a safe treatment strategy after discussion with the patient or a relative.

B 6- Differentiate between diseases categorized together e.g. urethral discharges, genital ulcers.

**B - Professional/practical skills:**

C1- Make clinical decisions based on evidence & obtained findings.

C 2- Select appropriate investigations.

C3- Interpret results obtained from history, clinical examination & diagnostic testing.

C4- Plan a safe management after discussion with the patient himself or a relative.

C5- Fully document the patient's history & examination findings and present information clearly in different, written, oral or electronic forms.

C6- Take care sexually transmitted infections using universal precautions.

C 7- Record a detailed and structured andrology & STDs history

C 8- Perform a standard male genital examination. C 9- Perform certain

diagnostic tests important in the field of Andrology like microscopic

examination of semen (conventional and computer assisted semen analysis (CASA) and prostatic fluid, testicular biopsy, intracavernosal injection (ICI),

monitoring of nocturnal penile erections (using the Rigiscan) and look for

varicocele using the Doppler US and some diagnostic tests for STDs like

urethral swabs, prostate examination and expressed prostatic fluid

microscopic exam and two glasses test..

C 10- Practice certain therapeutic procedures like: semen processing, correction of priapism, testicular sperm extraction (TESE) and percutaneous sperm aspiration (PESA)

**D - Communication & Transferable skills**

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

D 2- Manage time, services and resources effectively.

D 3- Set 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- Present 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.

The broad aims of the course are as follows:

1- Provides the MSc student with detailed knowledge about most of skin diseases probably seen by a skin specialist. 2- Provides MSc students with detailed dermatology clinical skills

3- Trains the MSc candidate how to differentiate between similar skin diseases after making an appropriate differential diagnosis.

4- Trains the MSc candidate how to perform certain diagnostic and therapeutic procedures for cases of skin diseases like skin biopsy, wood's light examination, dermoscopy cases.

5- Trains the MSc candidate how to plan a standard diagnostic algorithm for skin diseases

6- Trains the MSc candidate how to propose treatment strategies for most cases of skin diseases

7- Trains the MSc candidate how to acquire an ethical attitude in general and towards patients, relatives, seniors, tutors and colleagues.

8- Trains the MSc candidate how to Perform certain treatment procedures for the skin like light therapy, dermabrasion, cry and electrocautery, excision of some skin lesions chemical peel, and laser therapy.

9- Trains the MSc candidate how to carry out scientific research and community service

## **(2) Intended Learning Outcomes (ILOs):**

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

### **A- Knowledge and Understanding**

A1- Recognize the etiology, pathogenesis, clinical features, investigations, differential diagnosis, complications and treatment of different skin diseases.

A2- Outline the relations between the systemic diseases & the skin

A 3- Explain the different diagnostic tests to be used in identification of most skin diseases.

A4- Discuss the lines of treatment of skin diseases including topical and systemic therapy, phototherapy, and basics of dermatological surgery & Laser therapy.

**B - Intellectual skills**

MSc Degree provides opportunities for candidates to achieve and demonstrate the following intellectual qualities:

B-1- Assimilate scientific data and bring it into his clinical dermatology practice

B 2- Interpret clinical data on approaching cases.

B 3- Summarize the appropriate tests to diagnose a dermatology case

B 4- Analyze data obtained from history, clinical examination and laboratory reports to approach cases.

B 5- Prioritize the different patient's problems and set up an appropriate algorithm for proper problems management.

B 6- Propose good and interesting points for clinical studies in the field.

B 7- Plan a safe treatment strategy after discussion with the patient or a relative.

B 8- Compare between different skin diseases categorized together e.g. immunobullous diseases according to levels of cleavage.

**C - Professional/practical skills:**

C1- 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.

C 6- Apply data from literature into the specialty.

**D - Communication & Transferable skills:**

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

D 2- Manage 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) Course content**  
**3 credit hours**

**Andrology module No. 2 (Sexual medicine)**

Lectures	Teaching hours
<b>1- Psychology and physiology of sexual desire, arousal and response</b>	<b>6</b>
a) Central nervous mechanisms	
b) Role of hormones	
c) Genital responses	
d) Orgasm, emission and ejaculation	
<b>2. Ageing and Sexuality</b>	
a. The effect of physiological, psychological and social factors throughout life	<b>4</b>
b. Changes in sexuality throughout life	
<b>3. Sexual Dysfunctions in men and women</b>	<b>5</b>
a) Definitions and classification	



b) Epidemiology, pathophysiology and risk factors	
c) Differentiation between sexual dysfunction and short term, or transient, alterations of sexual function.	
d) Diagnosis and treatment of sexual dysfunctions: i. Desire disorders ii. Arousal disorders including erectile dysfunction and priapism. iii. Orgasmic disorders iv. Ejaculatory disorders v. Genital pain and pelvic floor disorders vi. Structural / anatomical abnormalities including congenital and acquired penile deformities vii. Priapism	<b>11</b>
<b>4. Deviant sexual behavior:</b>  a. Paraphilias (exhibitionism, voyeurism, pedophilia, sadomasochism, fetishism etc.) b. Sexual offences (abuse, assault and rape) c. High risk, compulsive and / or addictive sexual behavior d. Homosexuality.	<b>5</b>
<b>5. Gender Identity Disorders</b>	<b>3</b>
<b>6. Clinical Management of sexual disorders</b>	<b>5</b>
a. Principles  i. Evidence based medicine  ii. Combination of psychosomatic and somato-medical approach iii. Interdisciplinarity iv. Patient and couple centered	
b. Methods  i. Establishing a sexual medicine clinic ii. Counseling, Sex therapy, Psychotherapy iii. Pharmacological iv. Physical and surgical	<b>6</b>
<b>Total</b>	<b>45</b>

(5) Teaching methods:

5.1: Lectures

- 5.2: Workshops
- 5.3: Grand meetings
- 5.4: Case presentations
- 5.5: specialty conferences
- 5.6: Hands on training

## **(6)Assessment methods:**

**6.1 MCQ & EMQ exam for assessment of intellectual and knowledge ILOs**

**6.2 MEQs : Short essay questions for assessment of ILOs number A1,A2.**

**6.3: Log book for activities for assessment of:** mainly for assessment practical & transferrable skills, attendance of different conferences, thesis discussions, seminars, workshops, Attendance of scientific lectures.

**6.4: seminars:** the candidate should prepare and present at least one seminar in a topic related to the course and determined by the supervisors in front of the department staff .

### ***Assessment Schedule (100 marks)***

**Assessment 1:** MCQ & short questions examination by the end of 1 st semester for assessment of knowledge and intellectual skills (80%)

**Assessment 2:** Logbook required activities to go through end semester examination.

**Assessment 3:** the candidate should prepare and present at least one seminar in a topic related to the course and determined by the supervisors in front of the department staff (20%).

### **References of the course:**

**7.1: H and books:** Andrology Department staff handouts

**7.2: Text books:** Andrology (3<sup>rd</sup> Edition, Springer, 2010),

Advances in sexual medicine (Research Signpost, 2009),textbook of STDs and AIDS by CN Sowmini, WHO handbook of STDs

**7.3: Journals:** International Journal of Impotence

Research, Journal of sexual Medicine, Journal of

Andrology, Andrology, International journal of Andrology, Andrology

Archives, Fertility & sterility Journal. AIDS patient care and STDs, Journal ---

International journal of

STD & AIDS

**7.4: Websites:** [www.IJIR.org](http://www.IJIR.org), [www.telemedicine.org](http://www.telemedicine.org), [www.asrm.org](http://www.asrm.org),

[www.aua.org](http://www.aua.org), [www.andrologysociety.com](http://www.andrologysociety.com), [www.andrology.com](http://www.andrology.com),

[www.asiaandro.com](http://www.asiaandro.com)

**(7) Facilities and resources mandatory for course completion:**

**1- Daily Andrology Outpatient clinic**

**2- Fully Equipped Lecture halls**

**3- Department library**

**4- Faculty library**

**5- An equipped Clinical Andrology unit**

**6- Andrology laboratory**

**Course** Course coordinator:

Samir E Ihanbly, MD

Head of the department:

Prof. Ashraf Hassan, MD