



**COURSE SPECIFICATION of Advanced course in ART (assisted reproductive techniques)**

**MSc Dermatology, Andrology and STDs Faculty of Medicine- Mansoura University**

**(A) Administrative information**

<b>(1) Programme offering the course:</b>	<b>MSc Dermatology, Andrology and STDs</b>
<b>(2) Department offering the programme:</b>	<b>Dermatology, Andrology and STDs</b>
<b>(3) Department responsible for teaching the course:</b>	<b>Dermatology, Andrology and STDs</b>
<b>(4) Part of the programme:</b>	<b>second part</b>
<b>(5) Date of approval by the Department`s council</b>	<b>9/4/2023</b>
<b>(6) Date of last approval of programme specification by Faculty council</b>	<b>18/4/2023</b>
<b>(7) Course title:</b>	<b>Advanced course in ART (assisted reproductive techniques)</b>
<b>(8) Course code:</b>	<b>DERM 515 ART</b>
<b>(9) Total teaching hours:</b>	<b>30</b>
<b>(10) Number of credit hours</b>	<b>2</b>

**(B) Professional information**

**(1) Course Aims:**

The broad aims of the course are as follows:

- 1- Provides the student with advanced knowledge about ART (assisted reproductive techniques).
- 2- Be able to plan a standard diagnostic algorithm for steps of usage of ART

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

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

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

**A- Knowledge and Understanding**

- A1 - Outline conventional IVF and related techniques (GIFT, ZIFT, embryo transfer).
- A2- Explain different types of sperm preparation (for IUI, IVF, ICSI)
- A3 - Discuss ART for male infertility (indications, assessment, and genetic counseling)
- A4 - Recognize different methods of sperm collection [surgical and nonsurgical].
- A5- Discuss the cryopreservation (sperms, tissue, embryo) A6- Recognize the outcome and complications of ART

A7- Explain the legal aspects of ART A8–

Identify the artificial insemination

A9- Describe the gamete micromanipulations (zona drilling, post-zona drilling, sub zona sperm injection, ICSI, assisted hatching)

**B- Intellectual ILOs**

B1- Compare between different types of IVF

B2- Differentiate between different types of gamete micromanipulations.

**(3) Course content:**

<b>Subjects</b>	<b>Lecture</b>
1. Conventional IVF and related techniques (GIFT, ZIFT, embryo transfer).	<b>4</b>
2. types of sperm preparation (for IUI, IVF, ICSI)	<b>4</b>
3. ART for male infertility (indications, assessment, and genetic counseling)	<b>4</b>
4. Different methods of sperm collection [surgical and nonsurgical].	<b>4</b>
5. cryopreservation (sperms, tissue, embryo)	<b>4</b>
6. outcome and complications of ART	<b>2</b>
7. legal aspects of ART	<b>2</b>

8. artificial insemination	<b>2</b>
9. gamete micromanipulations (zona drilling, post-zona drilling, sub zona sperm injection, ICSI, assisted hatching)	<b>4</b>

**(4) Teaching methods: 4.1:**

**Lectures**

**4.2 : Journal clubs**

**4.3 : Workshops**

**4.4 : Grand meetings**

**4.5 : Case presentations**

**4.6 : Specialty conferences**

**4.7 4.7: Hand on training**

**(5) Assessment methods: Assessment methods.**

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

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

**5.3: 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.

**5.4: seminars:** the candidate should prepare and present at least one seminar in atopic 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 2<sup>nd</sup> semester for assessment of knowledge and intellectual skills (80%)

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

**(5) Assessment 3:** the candidate should prepare and present at least one seminar in atopic related to the course and determined by the supervisors in front of the

department staff (20%).

**(6) References of the course:**

6.1 : **Hand books:** conferences and Department staff handouts

6.2 : **Text books:** Andrology: Male Reproductive Health and Dysfunction,

E. Nieschlag, H.M. Behre and S. Nieschlag (Editors) 2009, Springer; 3rd ed.

6.3: **Journals:** human andrology, fertility sterility

6.3 : **Websites:** [www.iasstdaids.org](http://www.iasstdaids.org), [www.telemedicine.org/std](http://www.telemedicine.org/std) ,and

[ijsa.rsmjournals.com](http://ijsa.rsmjournals.com) 6.4: **Others:** Andrology course of Cairo University

**(7) Facilities and resources mandatory for course completion: 1-Fully Equipped**

Lecture halls

2-Department library 3-

Faculty library

Course coordinator:

**Prof. Samir Elhanbaly, MD** Head

of the department: **Prof. Ashraf**

**Hassan, MD**