



**COURSE SPECIFICATION of Advanced embryology & assisted
reproductive techniques**

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

(A) Administrative information

(1) Programme offering the course:	MD Dermatology, Andrology and STDs
(2) Department offering the programme:	Dermatology, Andrology and STDs
(3) Department responsible for teaching the course:	Dermatology, Andrology and STDs
(4) Part of the programme:	second part
(5) Date of approval by the Department`s council	3/4/2016
(6) Date of last approval of programme specification by Faculty council	9/8/2016
(7) Course title:	Advanced embryology & assisted reproductive techniques
(8) Course code:	DERM 615 ART
(9) Total teaching hours:	١٥
(10) Number of credit hours	1

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

1- Provides the student with advanced knowledge **in embryology & assisted reproductive techniques.**

(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.

B3-Plan a standard diagnostic algorithm for steps of usage of ART

(3) Course content:

Subjects	Lectures
1. Conventional IVF and related techniques (GIFT, ZIFT, embryo transfer).	2
2. types of sperm preparation (for IUI, IVF, ICSI)	2
3. ART for male infertility (indications, assessment, and genetic counseling)	2
4. Different methods of sperm collection [surgical and nonsurgical].	2
5. cryopreservation (sperms, tissue, embryo)	2
6. outcome and complications of ART	1
7. legal aspects of ART	1
8. artificial insemination	1
9. gamete micromanipulations (zona drilling, post-zona drilling, sub zona sperm injection, ICSI, assisted hatching)	2
Total	10

(4) Teaching methods:

4.1: Lectures

(5) Assessment methods:

5.1: Written exams for assessment of knowledge and intellectual ILOs

Assessment schedule:

- **MCQ Exam at the end of the semester**

- **Final Written exam** after 36 months of registration to MD degree

Marks of each Assessment:

- **MCQ Exam 20 marks.**
- **Final Written exam 80 marks.**

(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, www.telemedicine.org/std ,and 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. Samie Elhanbaly, MD

Head of the department:

Prof. Ibrahim Abu-Bakr Abdel Hamid, MD

Date:3/4/2016