



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

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

**(A) Administrative information**

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| <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>3/4/2016</b>  |
| <b>(6) Date of last approval of programme specification by Faculty council</b> | <b>9/8/2016</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>١٥</b>  |
| <b>(10) Number of credit hours</b>   | <b>1</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>Lectures</b> |
|---|-----------------|
| 1. Conventional IVF and related techniques (GIFT, ZIFT, embryo transfer).   | <b>2</b>        |
| 2. types of sperm preparation (for IUI, IVF, ICSI)  | <b>2</b>        |
| 3. ART for male infertility (indications, assessment, and genetic counseling)                                       | <b>2</b>        |
| 4. Different methods of sperm collection [surgical and nonsurgical].  | <b>2</b>        |
| 5. cryopreservation (sperms, tissue, embryo)  | <b>2</b>        |
| 6. outcome and complications of ART   | <b>1</b>        |
| 7. legal aspects of ART   | <b>1</b>        |
| 8. artificial insemination  | <b>1</b>        |
| 9. gamete micromanipulations (zona drilling, post-zona drilling, sub zona sperm injection, ICSI, assisted hatching) | <b>2</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: Hand on training**

#### **(5) Assessment methods:**

**5.1: Written exams for assessment of** knowledge and intellectual ILOs

**5.2 MCQ continuous assessment 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 admission to the job or 30 months after registration to MS degree

#### **Marks of each Assessment:**

- **MCQ Exam 30 marks.**
- **Final Written exam 120 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](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. Samie Elhanbaly, MD**

**Head of the department:**

**Prof. Ibrahim Abu-Bakr Abdel Hamid, MD**

**Date:3/4/2016**