



## Professional Training Program Specifications

**Program Title:** Professional Certificate in Assisted Reproduction  
**University:** Cairo University  
**Faculty:** Faculty of Medicine  
**Department(s):** Obstetrics and Gynaecology  
**Organizations:** Cairo University IVF Centre  
**Academic year:** 2018/2019  
**Duration:** 11 Months  
**Credit Points:** 30

**Pre-requisite:**

- OB GYN diploma or masters, MD, PhD, MRCOG
- 3 years of OB GYN practical practice or more

**Trainers (Names/Affiliations):**

**Reproductive Medicine team**

- AbdelMaguid Ramzy. Professor OB/GYN, Cairo University.
- Mostafa El-Sadek. Professor OB/GYN, Cairo University.
- Ehab Soliman. Professor OB/GYN, Cairo University.
- Ayman Abdel-Halim. Professor OB/GYN, Cairo University.
- Mona Aboulghar. Professor OB/GYN, Cairo University.
- Hisham Al-Inany. Professor OB/GYN, Cairo University.
- Aml Shohayeb. Professor OB/GYN, Cairo University.
- Fouad Abou-Hamila. Professor OB/GYN, Cairo University.
- Noura Nassery. Professor OB/GYN, Cairo University.
- Mohamad A.F. Yousef. Ass. Professor OB/GYN, Cairo University.

**Gynecological Endoscopy team**

- Prof. Ahmad Al-Minawy. Professor OB/GYN, Cairo University.
- Hisham Kandil. Professor OB/GYN, Cairo University.
- Prof. Khaled Abdel-Aziz. Professor OB/GYN, Cairo University.

**Andrology team:**

- Mohamad Abdel-Fatah. Professor of Andrology, Cairo University.
- Hossam Hosny. Professor of Andrology, Cairo University.

**Director:**

- AbdelMaguid Ramzy. Professor OB/GYN, Cairo University.

**Co-ordinators:**

- Magdy Ibrahim. Professor OB/GYN, Cairo University.
- Mohamad A.F. Youssef. Ass. Professor OB/GYN, Cairo University.



### **Aim of the professional training course**

This professional training course in Assisted Reproduction provides the advanced intellectual and clinical skills needed to enable the candidates to appropriately and competently manage infertile couples seeking pregnancy

### **Needs Assessment**

Although, there is an increasing demand for Assisted Reproduction Techniques (ART) among Egyptian infertile population to face the state of childlessness (infertility). The current contents of Obstetrics and Gynaecology specialty education, especially the post graduate teaching, is lacking the updated skills and knowledge of ART. The Cairo University IVF unit, with all its teaching facilities and faculty experience in previous workshops, will provide the practicing platform for teaching the theoretical and practical aspect of this specialty. This will enforce the status of Cairo University as a foundation in education and research. Kasr El-Aini Medical School legacy will live throughout future generations.

### **Intended learning outcomes (ILOs)**

**By the end of the professional training program, students should be able to:**

**a. Knowledge and understanding (10%):**

- i. Identify the basic knowledge of assisted reproductive technologies.
- ii. Explain to patients and their families regarding the different aspect of assisted reproductive technology.
- iii. Know the indications, contraindications, and complications of different techniques of ART.
- iv. Recognize male and female reproductive endocrinology.

**b. Intellectual skills (10%):**

- i. Distinguish the use of different modalities of ultrasonography.
- ii. Formulate management plan according to the patients' needs.

**c. Professional skills (75%):**

- i. Treat patients with dignity, compassion and care for their particular needs.
- ii. Request and interpret investigations related to ART.
- iii. Interpret ultrasonographic findings to derive clinical conclusions.
- iv. Arrange management priorities according to the patient's clinical situation and counseling.
- v. Perform ovum pick-up and embryo transfer under strict supervision.
- vi. Perform fine needle aspiration and testicular biopsies to extract sperms under strict supervision.
- vii. Implant Counseling plan for infertile couples
- viii. Manage complications related to medication or surgical interventions

**d. General and Transferable skills (5%):**

Work in a team and fellow team members and staff.



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### Content:

*Attached in separate sheets*

**Module 1 (10%):** Reproductive endocrinology and female infertility

**Module 2 (25%):** Assisted Reproduction Techniques basics (physiology, reproductive endocrinology, medical embryology, applied genetics, and immunology).

**Module 3 (50%):** Operative techniques and IVF/ICSI laboratory.

**Module 4 (10%):** Male infertility diagnosis and management.

**Module 5 (elective module) (5%):** Fundamentals of evidence based reproductive medicine and **research methodology**

### Teaching methods

- Lectures.
- Hands-on models.
- Interactive video presentations.
- Clinical outpatient interactive sessions.
- Ultrasonography monitoring sessions and folliculometry patient monitoring.
- Staff rounds attendance.
- Live observation training skill sessions.
- Hysteroscopy sessions: observing and interacting with the faculty.
- Assignments.
- Project: presentation and journal summaries.

### List of References

1. Clinical gynecologic endocrinology and infertility, 8<sup>th</sup> edition 2011. Leon Speroff and Marc A. Fritz.
2. Yen and Jaffe's reproductive endocrinology 7<sup>th</sup> edition 2014. Jerome F. Strauss and Robert L. Barbieri.
3. Textbook of assisted reproductive technologies, laboratory and clinical perspectives, 3<sup>rd</sup> edition 2009. David K. Gardner.
4. Textbook of in vitro fertilization and assisted reproduction, 3<sup>rd</sup> edition. Peter R. Brinsden.
5. Reproductive endocrinology and infertility, Douglas T. Carrell C. and Matthew Peterson. 2010.
6. In – vitro fertilization, 3<sup>rd</sup> edition 2011, Kay Elder and Brian Dale.
7. Human Reproduction. Oxford Journals.
8. Fertility and sterility
9. Reproductive Biomedicine online (RBM).

### Assessment



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### 1. Attendance criteria :

At least 80% all sessions

### 2. Assesment methods :

- Attendance: 80% attendance is a prerequisite for modular exam.
- Interaction in classes: 10%
- Assignments: 30%
- Quizzes: 10%
- Modular exams: 50%
- Filling a logbook is a prerequisite for modular exam.

### A. Log book

The candidates will have logbook, which should be submitted by the end of program. The mark of logbook will be distributed on

- Lectures attendance.
- Live surgery attendance.
- Workshops attendance.
- Field visits.
- Final seminar.

### 3. Assesment Description

<b>Attendance</b>	The trainee should attend 100% of theoretical, practical, and other activity sessions. <u>More than 20% absence will forbid the final exam attendance.</u>
<b>In-class interaction</b>	Including active participation in brain storming, group discussion, asking questions, answering questions, perspective/opinion presentation.
<b>Assignments</b>	All trainees must answer all assignments to gain the full mark. If the trainee does not submit the assignment within allowed time, (s) he will lose all the assignment mark. Delayed submission will discount 30% of the assignment mark.
<b>Quizzes &amp; case scenarios</b>	There will be a monthly quiz for all trainees upon which the quiz mark will be assigned. Absence in the quiz day will discount the whole mark of that quiz.
<b>Modular exams</b>	See below

### A. Written exams:

- Four modular exams, one at the end of each core module.



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- Format: MCQs, true or false and case studies.
- One final exam at the end of the program.
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### **B. Objective structured clinical exam (OSCE):**

- One exam at the end of program. Candidate pass through five stations, each is five minutes in duration. During their rotation, candidates perform the following tasks in different stations:
- Observation of specific clinical test.
- Interpretation of a clinical sign.
- Report a differential diagnosis.
- Specify a clinical diagnosis.

### **C. OSPE**

### **D. Oral exam:**

- One oral exam will be held at the end of the program. The candidate passes through four sessions each has a board of two professors.

### **4. Pass/Fail criteria**

- In all written, clinical and oral exams, the pass /fail limits will be defined using a formal standard setting process provided that the pass mark is 60% or more.

### **Reporting**

The coordinator will provide an “*Interim Report*” every 3 months documenting progress in program implementation. A “*Final Program Report*” will be submitted to the committee at the end of each intake.

### **Signatures**

Managing Director

**AbdelMaguid Ramzy.**

Prof. of OB. GYN., Faculty of Medicine, Cairo University.

Head of the Kasr Al-Aini IVF Assisted Conception Unit

Head of Department

**Mohamad Momtaz Awad.**

Prof. and Chairman of OB. GYN. Department,

Faculty of Medicine, Cairo University.

### **Appendices**

**Module 1:** Reproductive endocrinology and female infertility

**Module 2:** ART basics (medical embryology, applied genetics and immunology).



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**Module 3:** Operate Techniques and IVF laboratory.

**Module 4:** Male infertility (diagnosis and management).

**Module 5:** Fundamentals of evidence-based reproductive medicine.

Hours per module	Knowledge and understanding (25%)	Professional skills (75%)	Total
Module 1 (10%)	21	135	156
Module 2 (25%)	21	135	156
Module 3 (50%)	21	135	156
Module 4 (10%)	21	135	156
Module 5 (5%)	21	135	156
Practical (hrs)		675	675
Theoretical (hrs)	105		105