



COURSE SPECIFICATION

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course.	Postgraduate degree MSc of Obstetrics and Gynecology
(2) Department offering the course.	Obstetrics and Gynecology
(3) Department responsible for teaching the course.	Obstetrics and Gynecology
(4) Part of the programme.	Second part
(5) Date of approval by the Department's council	27/7/2016
(6) Date of last approval of programme specification by Faculty council	
(7) Course title.	Assisted reproductive technology
(8) Course code.	GYN 521 ART
(9) Total teaching hours.	15 hours
(10) Credit hours	1

(B) Professional information

(1) Course Aims:

The broad aims of the course are to provide reproductive health and reproductive endocrinology knowledge to prepare a skilled Gynecologist enabled in training and research in the area of reproductive health including fertility and infertility, assisted conception, sexual medicine and sexually transmitted infections (STIs). The candidate should acquire the scientific knowledge and skills that enables them to engage in medical education and scientific medical research.

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

- A.1- Discuss the role of the endocrine system in reproduction with particular reference to the hypothalamic-pituitary gonadal axis.
- A.2- Describe the anatomy and physiology of the key organs in the male and female reproductive tract.
- A.3- Describe the establishment and maintenance of menstrual cycle.
- A.4- Explain routine diagnostic laboratory techniques applicable to endocrine investigations.
- A.5- Know the scientific knowledge related to human reproduction including male fertility, human sexuality and STDs.
- A.6- Recognize the basic values of researches regarding pathophysiology of different endocrinological problems related to infertility, assisted reproduction, female sexual dysfunction and STIs.
- A.7- Describe in details the development of current management modalities for different endocrinological problems including infertility, assisted reproduction, sexual dysfunctions and STIs.
- A.8- Aware of the areas of research in the field of endocrinology leading to development of new diagnostic procedures and innovative therapies.

B- Intellectual skills

- B.1-** Analyze symptoms/signs and correlate them to the basic knowledge he had acquired and reconstruct a differential diagnosis for endocrinological complaints.
- B.2-** Design an appropriate diagnostic plan for evaluation of all and rare complaints taking into consideration the nature of the clinical situation and the risks, benefits and costs to the patient.
- B.3-** Prepare and set up treatment plans for all problems taking into account the cultural and individual needs.
- B.4-** Acquire the ability to develop new and innovative solutions to different problems.
- B.5-** Acquire advanced experience in one of the basics fields related to reproductive endocrinology (chosen by the candidate).

Curriculum structure and contents:

.a- Duration of the programme (in years or months): 30 month

(3) Course content.

Subjects	Lectures
Male and female subfertility:	
<ul style="list-style-type: none"> ▪ Female (ovulatory disorders, tubal disorders, endometriosis, cervical & uterine factors, genetic & developmental disorders) 	1h
<ul style="list-style-type: none"> ▪ Male (structural, endocrine, pharmacological, infectious, lifestyle, genetic) 	
<ul style="list-style-type: none"> ▪ Unexplained infertility - Long term sequelae of cancer treatment - Sterilisation regret 	
Indications, limitations and interpretation of investigative techniques:	
<ul style="list-style-type: none"> ▪ Semen analysis 	1h
<ul style="list-style-type: none"> ▪ Endocrine assessment 	
<ul style="list-style-type: none"> - Assessment of ovulation - Assessment of the sub-fertile male - Amenorrhoea & oligomenorrhoea - Polycystic ovarian syndrome – Hyperprolactinaemia - Thyroid/adrenal function - Gonadal failure 	1h
<ul style="list-style-type: none"> ▪ Genetic analysis 	
<ul style="list-style-type: none"> - Chromosome analysis e.g. sex chromosome abnormalities 	1h
<ul style="list-style-type: none"> - Genetic abnormalities e.g. cystic fibrosis 	
Operative investigative procedures	
<ul style="list-style-type: none"> ▪ Diagnostic laparoscopy - Diagnostic hysteroscopy 	1h
Indications, limitations, techniques and complications of:	
<ul style="list-style-type: none"> ▪ Ovulation induction (clomifene, gonadotropins, gonadotrophin-release hormone) 	1h
<ul style="list-style-type: none"> ▪ Other medical interventions (e.g. metformin, dopaminergic drugs) 	
<ul style="list-style-type: none"> ▪ Intrauterine insemination 	
<ul style="list-style-type: none"> ▪ In vitro fertilisation 	1h
<ul style="list-style-type: none"> ▪ Intracytoplasmic sperm injection 	
<ul style="list-style-type: none"> ▪ Surgical sperm recovery 	

Legal and ethical issues	
<ul style="list-style-type: none"> ▪ Human Fertilisation and Embryology Act - Welfare of the child - Embryo storage - Gamete donation - Surrogacy 	1h
Indications, limitations and complications of surgery in relation to male and female Infertility:	
<ul style="list-style-type: none"> ▪ Reversal of sterilisation and vasectomy - Adhesiolysis - Salpingostomy - Surgical management of endometriosis 	1h
<ul style="list-style-type: none"> ▪ Ovarian diathermy – Myomectomy - Hysteroscopic surgery -Varicocoele 	
Sexually Transmitted Infections including HIV/ AIDS	
<ul style="list-style-type: none"> ▪ Transmission - Clinical features - Detection- Prevention 	1h
<ul style="list-style-type: none"> ▪ Treatments - Test of cure - Contact tracing - Health advisors - Genitourinary medicine services 	
<ul style="list-style-type: none"> ▪ Screening programmes - Specific conditions 	1h
<ul style="list-style-type: none"> ▪ Chlamydia 	
<ul style="list-style-type: none"> ▪ HIV 	1h
<ul style="list-style-type: none"> ▪ Parasitic infections 	
<ul style="list-style-type: none"> ▪ Fungal infections 	1h
<ul style="list-style-type: none"> ▪ Bacterial infections 	
<ul style="list-style-type: none"> ▪ Protozoal infections - Viral infections 	
Sexual problems	
<ul style="list-style-type: none"> ▪ The anatomy and physiology of human sexual response. - The psychogenic aetiology and presentation of common sexual problems such as loss of sexual interest and arousal, vaginismus, anorgasmia 	1h
<ul style="list-style-type: none"> ▪ The effect of age, cultural influences, illness and drugs on sexual behaviour and performance. Gender dysphoria 	
<ul style="list-style-type: none"> ▪ The principles of psychosexual counselling - Sexual problems in special needs groups such as physical and learning disability 	1h
<ul style="list-style-type: none"> ▪ Covert presentations of psychosexual problems and childhood sexual abuse. - Referral pathways to local expertise in the field of psychosexual medicine and sexual dysfunction 	

Course Title/Code	Programme ILOs														
	A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5		
▪ Female (ovulatory disorders, tubal disorders, endometriosis, cervical & uterine factors, genetic & developmental disorders)	x	X							x	x	x	x	x		
▪ Male (structural, endocrine, pharmacological, infectious, lifestyle, genetic)		x			X				x	x	x	x	x		
▪ Unexplained infertility - Long term sequelae of cancer treatment - Sterilisation regret						x	x	x	x	x	x	x	x		
▪ Semen analysis		x	x			x	x		x	x	x	x	x		
▪ Assessment of ovulation - Assessment of the sub-fertile male - Amenorrhoea & oligomenorrhoea - Polycystic ovarian syndrome – Hyperprolactinaemia - Thyroid/adrenal function - Gonadal failure	x			x					x	x	x	x	x		
▪ Chromosome analysis e.g. sex chromosome abnormalities							x		x	x	x	x	x		
▪ Genetic abnormalities e.g. cystic fibrosis							x		x	x	x	x	x		
▪ Diagnostic laparoscopy - Diagnostic hysteroscopy							x		x	x	x	x	x		
▪ Ovulation induction (clomifene, gonadotropins, gonadotrophin-release hormone)							x		x	x	x	x	x		
▪ Other medical interventions (e.g. metformin, dopaminergic drugs)							x		x	x	x	x	x		
▪ Intrauterine insemination							x		x	x	x	x	x		
▪ In vitro fertilisation							x		x	x	x	x	x		
▪ Intracytoplasmic sperm injection							x		x	x	x	x	x		
▪ Surgical sperm recovery							x		x	x	x	x	x		
▪ Human Fertilisation and Embryology Act - Welfare of the child - Embryo storage - Gamete donation - Surrogacy							x		x	x	x	x	x		
▪ Reversal of sterilisation and vasectomy - Adhesiolysis - Salpingostomy - Surgical management of endometriosis							x		x	x	x	x	x		

Course Title/Code	Programme ILOs														
	A1	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3	B4	B5		
▪ Ovarian diathermy – Myomectomy - Hysteroscopic surgery -Varicocoele							x		x	x	x	x	x	x	
▪ Transmission - Clinical features - Detection- Prevention					x				x	x	x	x	x	x	
▪ Treatments - Test of cure - Contact tracing - Health advisors - Genitourinary medicine services					x				x	x	x	x	x	x	
▪ Screening programmes - Specific conditions					x				x	x	x	x	x	x	
▪ Chlamydia					x				x	x	x	x	x	x	
▪ HIV					x				x	x	x	x	x	x	
▪ Parasitic infections					x				x	x	x	x	x	x	
▪ Fungal infections					x				x	x	x	x	x	x	
▪ Bacterial infections					x				x	x	x	x	x	x	
▪ Protozoal infections - Viral infections					x				x	x	x	x	x	x	
▪ The anatomy and physiology of human sexual response. - The psychogenic aetiology and presentation of common sexual problems such as loss of sexual interest and arousal, vaginismus, anorgasmia	x					x			x	x	x	x	x	x	
▪ The effect of age, cultural influences, illness and drugs on sexual behaviour and performance. Gender dysphoria	x					x			x	x	x	x	x	x	
▪ The principles of psychosexual counselling - Sexual problems in special needs groups such as physical and learning disability	x					x			x	x	x	x	x	x	
▪ Covert presentations of psychosexual problems and childhood sexual abuse. - Referral pathways to local expertise in the field of psychosexual medicine and sexual dysfunction	x					x			x	x	x	x	x	x	

(4) Teaching methods:

- **4.1: Lectures**
- **4.2: Seminars**
- **4.3: Outpatient clinics**
- **4.4: Inpatient discussions**
- **4.5: Operative theater**
- **4.6: Specialized clinics**

(5) Assessment methods:

Log book :

Written exam : 50 marks including 20% MCQ (40 written – 10 MCQ)

(6) References of the course.

- 6.1-** Gynecology by Staff Members (book of the Department)
- 6.2-** William's manual of Gynecology
- 6.3-** Te Lined's Operative Gynecology
- 6.4-** Progress in Obstetrics & Gynecology series
- 6.5-** Recent advances in Obstetrics & Gynecology series
- 6.6-** Year book of RCOG series

Course coordinator:

Dr. Rafik Barakat

Dr. Sara Abdel Aziz

Head of the department:

Prof. Nasser Allakany

Date : 8/2016