



## COURSE SPECIFICATION

Faculty of Medicine- Mansoura University

### (A) Administrative information

(1) Programme offering the course.	Postgraduate degree MD of Fetal Therapy
(2) Department offering the course.	Obstetrics and Gynecology
(3) Department responsible for teaching the course.	Obstetrics and Gynecology
(4) Part of the programme.	<b>Second part</b>
(5) Date of approval by the Department's council	<b>24/8/2016</b>
(6) Date of last approval of programme specification by Faculty council	
(7) Course title.	<b>Fetal therapy</b>
(8) Course code.	<b>GYN 621 FT</b>
(9) Total teaching hours.	<b>30 hours</b>
(10) Credit hours	<b>2 hours</b>

## **(B) Professional information**

### **(1) Course Aims:**

To prepare a fetal maternal physician to provide the current and future trends in fetal therapy

The broad aims of the course are as follows:

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

#### **A- Knowledge and Understanding**

By end of training, trainee should :

- A.1- Demonstrate history of fetal therapy and counseling**
- A.2- Illustrate Diagnosis of fetal anomalies by different diagnostic modalities**
- A.3- Enlist for preventative fetal therapies**  
- neural tube defects (NTDs), severe fetal-maternal , alloimmune thrombocytopenia., and preterm labor.
- A.4- Understand Non-invasive fetal treatment: fetal pharmacotherapy -**  
Transplacental therapy
- A.5- Understand minimally invasive fetal treatment via needle insertion and fetoscopy**
- A.6- Aware of open fetal surgery for fetal tumors and neural tube defects**
- A.7- Know future Fetal therapy in the laboratory phase**  
A-Stem cell therapy , B-Gene therapy , C-Fetal surgery using a surgical robot D- Tissue engineering
- A.8- Recognize ethics in fetal therapy**

#### **B- Intellectual skills**

By end of training, trainee should be able to :

- B.1- Appreciate patient – physician relationship and its effect on early diagnosis , efficient treatment and follow up of fetal diseases**
- B.2- Realize importance of early diagnosis , efficient treatment and organized referral system to a tertiary care center**

**(3) Course content.**

Subjects	Lectures	Total Teaching Hours
<b>History of fetal therapy and counseling</b>		
• Introduction and history of fetal therapy	<b>1h</b>	
<b>Diagnosis of fetal anomalies 1<sup>st</sup> trimester</b>		
• Aneuploidy screening	<b>1h</b>	
• Level II ultrasound	<b>2h</b>	
• Role of 3D ultrasound	<b>2h</b>	
• Fetal MRI	<b>2h</b>	
<b>Preventative fetal therapies</b>		
• Prevention of neural tube defects (NTDs)	<b>1h</b>	
• Prevention of severe fetomaternal alloimmune thrombocytopenia.	<b>1h</b>	
• Prevention of preterm labor.	<b>2h</b>	
<b>Non-invasive fetal treatment: fetal pharmacotherapy</b>		
• Transplacental therapy	<b>2h</b>	
• Treatment of fetal arrhythmias	<b>2h</b>	
<b>Minimally invasive fetal treatment via needle insertion and fetoscopy</b>		
• Transfusion therapy	<b>1h</b>	
• Amniotic fluid management	<b>1h</b>	
• Shunting - Pleuro amniotic shunting - Vesico amniotic shunting - Laser treatment	<b>3h</b>	
<b>Open fetal surgery for fetal tumors and neural tube defects</b>		
• Hydrocephaly and neural tube effects	<b>1h</b>	
• Congenital diaphragmatic hernia	<b>1h</b>	
<b>Future Fetal therapy in the experimental stages</b>		
• A-Stem cell therapy	<b>1h</b>	

**30 hours**

• B-Gene therapy	1h		
• C-Fetal surgery using a surgical robot	1h		
• D-Tissue engineering	1h		
<b>Ethics in fetal therapy</b>	<b>3h</b>		

Course Title/Code	Programme ILOs									
	A1	A2	A3	A4	A5	A6	A7	A8	B1	B2
• Introduction and history of fetal therapy	x								X	X
• Aneuploidy screening		X							X	X
• Level II ultrasound		X							X	X
• Role of 3D ultrasound		X							X	X
• Fetal MRI		X							X	X
• Prevention of neural tube defects (NTDs)			X						X	X
• Prevention of severe feto-maternal alloimmune thrombocytopenia.				X					X	X
• Prevention of preterm labor.				X					X	X
• Transplacental therapy				X	X				X	X
• Treatment of fetal arrhythmias					X				X	X
• Transfusion therapy					X				X	X
• Amniotic fluid management						X			X	X
• Shunting - Pleuro amniotic shunting - Vesico amniotic shunting - Laser treatment							x		X	X
• Hydrocephaly and neural tube effects						X			X	X
• Congenital diaphragmatic hernia						X			X	X
• A-Stem cell therapy							X		X	X
• B-Gene therapy							X		X	X
• C-Fetal surgery using a surgical robot							X		X	X
• D-Tissue engineering							X		X	X
<b>Ethics in fetal therapy</b>								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 Obstetrics
- 6.3-** Progress in Obstetrics & Gynecology series
- 6.4-** Recent advances in Obstetrics & Gynecology series
- 6.5-** Year book of RCOG series

**Course coordinator:**

Prof. Mohamed Tawfek

Prof. Abdel Aziz Elrafeey

**Head of the department:**

Prof. Nasser Allakany

**Date :**