



**COURSE SPECIFICATION of**  
**Advanced course in Embryology**  
**MD Andrology and Sexually transmitted infections**  
**Faculty of Medicine- Mansoura University**

**(A) Administrative information**

<b>(1) Programme offering the course:</b>	<b>MD Andrology and Sexually transmitted infections</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 Embryology</b>
<b>(8) Course code:</b>	<b>ANDRO 615 AEM</b>
<b>(9) Total teaching hours:</b>	<b>45</b>
<b>(10) Credit hours</b>	<b>3</b>

## **(B) Professional information**

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

The broad aims of the course are as follows:

1- Provides the student with advanced knowledge about **Embryology** related to the field of Andrology and Sexually transmitted infections

### **(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-Recognize different stages and recent advances in explanation of Development of urogenital system

A2- Explain the different aspects of:

- a) Molecular embryology of Development of urogenital system
- b) Preimplantation genetic diagnosis and its applications.

A2 - Discuss the following:

1. Genetic factors and hormones that determine gender
2. Recent advances in sex determination and embryo selection in ICSI

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

B1- Demonstrate the correlation between stages of Development of urogenital system and different genetic defects.

B 2- Compare between different hormonal mechanisms of actions that affect stages of Development of urogenital system.

### **(3) Course content:**

<b>Subjects</b>	<b>Teaching hours</b>
a) stages and advances in explanation of Development of urogenital system	<b>7</b>
b) Molecular embryology of Development of urogenital system	<b>10</b>
c) Preimplantation genetic diagnosis and its applications	<b>10</b>
d) Genetic factors and hormones that determine gender	<b>10</b>
e) Recent advances in sex determination and embryo selection in ICSI	<b>8</b>

**(4) Teaching methods:**

**4.1: Lectures**

**4.2: Workshops**

**4.3: Grand meetings**

**4.4: Specialty conferences**

**(5) Assessment methods:**

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

**(6) Assessment schedule:**

**MCQ Exam at the end of the semester (one semester after MD registration)**

**Final Written exam Assessment after one semester after MD registration**

**(7) Percentage of each Assessment to the total mark:**

**MCQ Exam 20 % = 20 marks.**

**Final Written exam 80% = 80 marks.**

**(8) References of the course:**

**6.1: Hand books: 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. Edition, Grays anatomy. Human embryology.

**6.3: Journals:** human andrology,

**6.1: 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)

**(9) Facilities and resources mandatory for course completion:**

**1- Fully Equipped Lecture halls**

**2- Department library**

**3- Faculty library**

**Course coordinator:**

**Prof. Samir Elhanbaly, MD**

**Chairman of the department:**

**Prof. Ibrahim A. Abdel-Hamid, MD**

**Date: 3/4/2016**