



## COURSE SPECIFICATION

Faculty of Medicine– Mansoura University

### (A) Administrative information

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|---|--|
| (1) Program offering the course.                                      | General surgery MD                                   |
| (2) Department offering the program.                                  | General surgery                                      |
| (3) Department responsible for teaching the course.                   | General surgery                                      |
| (4) Part of the program.  | MD degree<br>General Surgery                         |
| (5) External evaluator(s)   | Prof. Dr. Alaa Khalil<br>Zagazig Faculty of Medicine |
| (6) Date of approval by the Department`s council                      | 27/5/2013  |
| (7) Date of last approval of program specification by Faculty council | 9/8/2016   |
| (8) Course title.   | Stem cell therapy                                    |
| (9) Course code.  | SUR 620 SCT  |
| (10) Total teaching hours.  | 30   |

## **(B) Professional information**

### **(1) Course Aims.**

The broad aims of the course are as follows: (either to be written in items or as a paragraph)

- 1- To prepare the candidates to acquire the required knowledge, skills of stem cell therapy in surgery.
- 2- To enable the candidate to apply the principles of stem cell therapy in clinical practice

#### **Within the overall aim, the objectives of the Program are as follows.**

1. Teaching the basics of stem cells and their uses.
2. Teach the candidate the indications for stem cell therapy in various conditions.
3. Educate the candidate about the medicolegal aspects of stem cell therapy in medical research

## **(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. To recognize the basics of stem cell therapy including types of stem cells.
- A2. Recognize the essential indications for using stem cell therapy in surgery including current and potential indications.
- A3. Explain the medicolegal aspects and ethical considerations of stem cell therapy.
- A4. Explain the methods of experimental application of stem cells in animals.

### **2- Intellectual activities (I)**

The Postgraduate Degree provides opportunities for candidates to achieve and demonstrate the following intellectual qualities:

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

- B1. Determine the proper clinical indications for using stem cell therapy in various surgical conditions.
- B2. Recognize the rationale of using stem cells in treatment of blindness, deafness and other conditions.
- B3. Realize the possible complications of using stem cell therapy.
- B4. Recognize the required ethical aspects before implementing stem cells in research.

**(3) Course content:**

| Subjects   |    |  |  |  |    |
|--|----|--|--|--|----|
| <p>1- <u>Current treatments</u><br/>                 2- <u>Potential treatments</u></p> <ul style="list-style-type: none"> <li>a. <u>Brain damage</u></li> <li>b. <u>Stem Cell Technologies</u></li> <li>c. <u>Cancer</u></li> <li>d. <u>Spinal-cord injury</u></li> <li>e. <u>Heart damage</u></li> <li>f. <u>Hematopoiesis (blood-cell formation)</u></li> <li>g. <u>Baldness</u></li> <li>h. <u>Missing teeth</u></li> <li>i. <u>Deafness</u></li> <li>j. <u>Blindness and vision impairment</u></li> <li>k. <u>Amyotrophic lateral sclerosis</u></li> <li>l. <u>Graft vs. host disease and Crohn's disease</u></li> <li>m. <u>Neural and behavioral birth defects</u></li> <li>n. <u>Diabetes</u></li> <li>o. <u>Transplantation</u></li> <li>p. <u>Stem cell educator therapy</u></li> <li>q. <u>Orthopaedics</u></li> <li>r. <u>Wound healing</u></li> <li>s. <u>Infertility</u></li> </ul> <p>3- <u>Clinical trials</u></p> | 30 |  |  |  | 30 |

|                             |  |  |  |  |  |  |
|-----------------------------|--|--|--|--|--|--|
| 4- Stem cell use in animals |  |  |  |  |  |  |
|-----------------------------|--|--|--|--|--|--|

**(4) Teaching methods.**

**4.1. Lectures**

**(5) Assessment methods.**

5.1. written exam for assessment of knowledge and intellectual activities.

5.2. M.C.Q exam for assessment of understanding and intellectual activities.

**Assessment schedule.**

Final exam at the end of the first semester.

MCQ exam at the end of the first semester.

**Percentage of each assessment to the total mark.**

Written exam: 40 marks

M.C.Q: 10 marks.

**Other assessment without marks: logbook**

**(6) References of the course.**

6.1. **Hand books.** Departmental book

6.2. **Text books.** Stell and Maran textbook of head and neck surgery.

6.3. **Journal.** Essentials of stem cell biology.

6.1. **Websites.**

6.1. **Others**

**(7) Facilities and resources mandatory for course completion.**

**Lecture halls**

**(8) Evaluation of Program's intended learning outcomes (ILOs):**

| Evaluator   | Tools*  | Signature |
|---|---|-----------|
| Internal evaluator (s)<br>Prof.Dr. Mohamed Farid<br>Prof.Dr.Mohamed Abdelwahab<br>Prof.Dr. Moh. Diaa El-Zawahry | Focus group discussion<br>Meetings                                |           |
| External Evaluator (s)<br>Prof.Dr. Alaa khalil  | Reviewing according to<br>external evaluator checklist<br>report. |           |
| Senior student (s)  | none  |           |
| Alumni  | none  |           |
| Stakeholder (s)   | none  |           |
| Others  | none  |           |

\* TOOLS= QUESTIONNAIRE, INTERVIEW, WORKSHOP, COMMUNICATION, E\_MAIL

We certify that all information required to deliver this program is contained in the above specification and will be implemented. All course specification for this program are in place.

|  |                   |
|--|-------------------|
| <b>Program coordinator:</b><br><b>Dr. Sameh Hany Emile</b><br><b>Lecturer of General Surgery. Mansoura University</b>                    | Signature & date: |
| <b>Head of the department:</b><br><b>Prof. Dr. Nazem Shams</b><br><b>Professor of General and surgical oncology. Mansoura University</b> | Signature & date: |
| <b>Dean:</b>   | Signature & date: |

|  |                   |
|--|-------------------|
| <b>Prof.Dr. El-Said Abdelhady</b>  |                   |
| <b>Executive director of the quality assurance unit.</b><br><b>Prof.Dr. Seham Gad El-Hak</b> | Signature & date: |