



## COURSE SPECIFICATION

Faculty of Medicine– Mansoura University

### (A) Administrative information

(1) Program offering the course.	Physiology
(2) Department offering the program.	General surgery
(3) Department responsible for teaching the course.	Physiology
(4) Part of the program.	First Part Master degree General Surgery
(5) External evaluator(s)	Prof. Dr. Alaa khalil 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.	Physiology
(9) Course code.	SUR 503
(10) Total teaching (credit) hours.	7

### (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 and clinical applications of physiology that are relevant to the general surgical practice.
- 2- To enable the candidate to integrate the data of physiology properly in the daily practice of Surgery and to comprehend the physiological background of different diseases that are mandatory for the optimal management for the surgical patient.

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

1. Teaching the basic medical science related to Clinical surgical practice with concern to the physiological background of surgical problems and its relation to the management.
2. Teaching the candidate how different aspects of physiology play a role in many surgery-related diseases.
3. Training the candidates on how to apply the physiological concepts in the process of diagnosis and treatment of elective and urgent surgical cases.
4. Training the candidate how to search for the recent knowledge and how to apply this in his field.
5. Training the candidate how to communicate and interpret data of different tests based on their physiological background (e.g. ECG, blood gases..etc).

## **(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 essential functions of the endocrine glands which is crucial for understanding the pathophysiology of endocrinopathy.
- A2. To describe the essential physiological components of the circulatory system that are important to comprehend the basis of circulatory disturbances as shock, edema, hemorrhage.
- A3. To discuss the mechanism of renal filtration and the regulation of renal blood flow so to understand the mechanism of renal failure and its surgical repercussions and effect on the homeostasis.
- A4. To explain the basic aspects of gastric and intestinal secretion and motility that serve to enhance his knowledge about how gastric and intestinal disorders evolve
- A5. To recognize the basis of natural hemostasis in order to apply them in the surgical hemostasis
- A6- Comprehend the regulation of body temperature and how to prevent or treat hypothermia in the surgical patient and its serious consequences.

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

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

**B- Intellectual skills**

B1. Analyze the physiological basis and its deviation in each surgical disease.

B2. Apply these skills especially with emergent and urgent cases.

B3. Relate the examination findings, investigational results and history taking to reach proper diagnosis of a surgical patients.

B4. Differentiate cases of surgical patient bases on their understanding of patho-physiological deviations.

Subjects	Lectures	Clinical	Laborator	Field	Total Teaching Hours
* Endocrine :- - Pancreas - Thyroid glands - Parathyroid gland * Circulation:- - Heart rate - Arterial blood pressure - Splanchnic circulation - Edema - Shock - Hemorrhage * Kidneys:- - Regulation of renal blood Flow and GFR - Functions of renal tubules - Acid base balance * G.I.T.:- - Gastric secretion and motility - Small intestinal motility, its control & disorders * Blood:- - Haemostasis * C.N.S.:- - Pain sensation and pain control system * Metabolism:- - Regulation of body temperature	7	None	None	None	7

#### (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: 48 marks

M.C.Q: 12 marks.

Oral exam: 40 marks.

**Other assessment without marks: logbook**

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

6.1. Hand books: Departmental book

6.2. Text books: Text Book of medical physiology (Guyton & Hall)

6.3. Journals:

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) Prof.Dr. Mohamed Farid Prof.Dr.Mohamed Abdelwahab Prof.Dr. Moh. Daaa El-Zawahry	Focus group discussion Meetings	
External Evaluator (s) Prof.Dr. Alaaa khalil	Reviewing according to external evaluator checklist 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> <b>Dr. Sameh Hany Emile</b> <b>Lecturer of General Surgery. Mansoura University</b>	Signature & date:
<b>Head of the department:</b> <b>Prof. Dr. Nazem Shams</b> <b>Professor of General and surgical oncology. Mansoura University</b>	Signature & date:
<b>Dean:</b> <b>Prof. Dr. El-Said Abdelhady</b>	Signature & date:
<b>Executive director of the quality assurance unit:</b> <b>Prof. Dr. Seham Gad El-Hak</b>	Signature & date:

