



**MASTER (MSc) DEGREE PROGRAM AND  
COURSES SPECIFICATIONS FOR  
MEDICAL PHYSIOLOGY**  
(According to currently applied credit points by laws)

***Medical Physiology***  
***Faculty of medicine***  
***Aswan University***

<b>Program Specification For Master degree Medical Physiology</b>	
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## **A- Basic Information**

- Program title: MSc degree of medical physiology (PHY200)
- Nature of the program: Single
- Responsible department: Medical Physiology
- Head of department: Prof. Dr. Mahmoud Raafat Abdelfadeel

## **B- Professional Information**

### **1- Program aims**

- 1- To prepare a highly qualified physiologist.
- 2- To introduce candidates to the basics of scientific medical research.
- 3- To Provide candidates with fundamental Physiologic knowledge.
- 4- To Enable the candidates to understand and get the best of published scientific research and do their own.

### **2- Intended learning objects (ILOs)**

#### **2/1 Knowledge and understanding:**

- A- Explain the functions of all body systems at the organ level.
- B- Describe the general cellular mechanisms
- C- Demonstrate a basic understanding of the physiological background of applied physiology in medical practice.

#### **2/2 Intellectual skills:**

By the end of the program the candidate should be able to:

- A- Identify a research question.
- B- Plan research projects.
- C- Write a research protocol in a scientific base.
- D- Collect scientific information.
- E- Use statistical techniques to analyze and present scientific data
- F- Interpret clinical physiology test results.
- G- Write a scientific paper.

### 2/3 Professional and practical skills:

- A- Effectively teach physiological knowledge and demonstrate practical experiments to students at the undergraduate level.
- B- Effectively perform and interpret practical results
- C- Incorporate research and medical ethics in all areas of practice.

## 3- Program structure and contents

- A- Duration of program: 3 years.
- B- Total number of credit points: 180 CP

### **Program is divided into:**

#### Part 1:

- Basic science course:

#### **The student chooses one from the following courses:**

- Biochemistry
- Pharmacology.
- Pulmonology.
- Neurology.
- Cardiology.
- Gastroenterology.

Or

- Endocrinology.

Students are allowed to set the exam of this course after 6 months from applying MSc degree.

- Elective course:

**The student chooses one from the following courses:**

- Medical statistics.
- Evidence based medicine.
- Medicolegal Aspects and Ethics in Medical Practice and Scientific Research
- Quality assurance of medical education.
- Quality assurance of clinical practice.
- Hospital management

- Thesis and one published research:

Thesis should be registered within 6 months from applying MSc degree.

Discussion and acceptance of thesis should not be set before 12 months from thesis registration.

### Part 2:

- Advanced physiology course:

- General cellular basis of medical physiology.
- Nerve and muscle.
- Neuroscience.
- Cardiovascular physiology.
- Blood& immunity.
- Gastrointestinal physiology.
- Respiration.
- General metabolism and regulation of body temperature.
- Renal physiology and body fluids.
- Endocrine system and reproduction..

Students are not allowed to set the exam of this part before 3 years from applying to MSc degree.

## 4- Assessment

### Final Exam Part I:

#### Basic science course:

Four-hour written exam in two papers + oral exam+ practical exam

#### Electives:

One elective course in one written exam paper for one hour.

### Final Exam Part 2:

#### Advanced physiology:

written exam in four papers each paper for three hours + oral exam+ practical exam.