



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

Medical Physiology
Faculty of medicine
Aswan University

Program Specification For MD degree Medical Physiology	
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A- Basic Information

- Program title: MD degree of medical physiology (PHY300)
- 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: 4-6 years.
- B- Total number of credit points: 420 CP

Program is divided into:

Part 1:

- Basic science courses:
 - Medical statistics.
 - Research methodology
 - Medicolegal Aspects & Ethics in Medical Practice and Scientific Research
 - **Physiology 1**
Applied Human Physiology of Cardiology Neurology and Chest

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

Elective course:

The student chooses two from the following courses:

- Advanced medical statistics.
- Evidence based medicine.
- Advanced infection control.
- Quality assurance of medical education.
- Quality assurance of clinical practice.
- Hospital management

- Thesis and two published researches:

Thesis should be registered within 12 months from applying MD degree.

Discussion and acceptance of thesis should not be set before 24 months from thesis registration.

Part 2:

- Advanced physiology course:
 - The cell and general PhysiologyAdvanced Physiology of:
 - CVS
 - CNS, Special Sense and Autonomic Nervous System
 - Muscle and Nerve.
 - Endocrine and Reproduction
 - Digestion
 - Respiration
 - General Metabolism
 - Blood and Immunity.
 - Kidney and Body Fluids

Students are not allowed to set the exam of this part before 4 years from applying to MD degree.

4- Assessment

Final Exam Part I:

Basic science courses:

Medical statistics & Research methodology, one paper written exam for 2 hours + oral exam.

Medicolegal Aspects and Ethics in Medical Practice and Scientific Research, Written exam in one paper for one hour + oral exam.

Applied Human Physiology, written exam in one paper for 3 hours + oral exam + practical exam.

Electives:

Two elective courses in two written exam papers each for one hour + oral exam.

Final Exam Part 2:

Advanced physiology:

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