

Physiology; Code: 251/1

A- Basic Information

Programme(s) on which the course is given:	Bachelor of Pharmacy
Department responsible for offering the course:	Department of Pharmacology and Toxicology
Department responsible for teaching the course:	Department of Physiology, Faculty of Medicine, Ain Shams University
Academic year:	First year-1st Semester
Course title and code:	Physiology, 251/1
Contact hours (credit hours):	Lecture: 3 (3), Practical: 2 (1), Total: 5 (3+1)
Course Coordinator:	Prof. Dr. Nehal Bahgat gamil

B- Professional Information

The course aim and intended learning outcomes are based on that mentioned in the programme specifications, with more course-related specific details.

1 - Overall Aims of Course

Upon successful completion of this course, the students should be able to demonstrate independently sufficient knowledge of the basic functions of the human body, mechanisms of these functions and its regulation. In addition, the students should be able to identify and to interpret some laboratory and clinical tests of the blood , cardiovascular system, respiratory and nervous system .

2 - Intended Learning Outcomes of Course (ILOs)

a- Knowledge and understanding:

The students should be able to:

a1 Recognize the normal physiology (functions , mechanism of function and regulation of function) of different body system (nervous, cardiovascular, digestive, urinary, respiratory and reproductive systems).

b-Intellectual skills

The students should be able to:

b1 Explain how body functions are executed.

b2 Apply the knowledge of physiology in understanding of pharmacology.

b3 Predict the outcome of disturbed physiology.

c- Professional and practical skills

The students should be able to:

c1 read and comment on demonstrated blood tests (haemoglobin content, haematocrit, ESR, osmotic fragility and blood typing).

c2 name instruments and devices in a photo (stethoscope, medical hammer, tuning fork) and apparatuses (Sahli apparatus, Westergren´s apparatus, spirometer)

c3 locate cardiac auscultatory areas on a photo.

c4 Caculate lung volumes and capacities in a spirogram.

d- General and transferable skills

The students should be able to:

d1 communicate with his colleagues and professors during the demonstration.

d2 express his calculations, comments and interpretations and defend his point of view

Course Contents

Topics	No. of hours	Lecture
Theoretical part:		
Introduction and homeostasis	3	1
Blood	6	2
Nerve and muscle physiology	3	1
Autonomic nervous system	6	2
Circulatory system	6	2
Respiration	3	1
The central nervous system	3	1
Special senses	3	1
Endocrine physiology	3	1
Urinary Physiology	3	1
Digestive system	3	1
Total	42	14
Practical Part:		
Blood	6	3
Cardiovascular system	6	3
Respiratory function test	2	1
Central nervous system	4	2
Special senses	4	2
Revision	2	1
Total	24	12

3 - Teaching and Learning Methods

- Lectures (Tools: board, overhead projector, data show).
- Practical sessions (Tools: laboratories, instruments, chemicals, animals, glassware).

4 - Student Assessment Methods

- Practical exam to assess practical skills detailed in items c1 and c2.
- Periodic exam to assess knowledge and understanding and intellectual skills detailed in items a1 and b1, b2, b3.
- Final exam to assess knowledge and understanding and intellectual skills detailed in items a1 and b1, b2, b3.

Assessment Schedule

Assessment 1	Periodic exams	Week 6
--------------	----------------	--------

Assessment 2	Practical exam	Week 13
Assessment 3	Final written exam	Week 15

Weighting of Assessments

Final-term Examination	70.00	%
Periodic Examination	20.00	%
Practical Examination	20.00	%
Other types of assessment	-	%
Total	100	%

5 - List of References

- Lecture handout.
- Laurie Kelly. 2005. Essentials of human physiology for pharmacy. CRC press.
- Recommended books: Fundamentals of physiology (Lauralee Sherwood, 4th edition).
- Textbook of Medical Physiology by [Arthur C. Guyton](#) and [John E. Hall](#), W.B. Saunders Company; 12th edition (2011).
- Physiological Reviews.

6 - Facilities Required for Teaching and Learning

Study halls, Laboratories, Equipments, Chemicals, Animal house, Glassware, Books, Audiovisual tools.

Course Coordinator: Prof. Nehal Bahgat Gamil

Head of Department: Prof. Ebtehal El-Demerdash

Course name	Physiology
code	251/1

Course matrix

Course content	a1	b1	b2	b3	c1	c2	d1
Introduction and homeostasis							
Blood							
Nerve and muscle physiology							
Autonomic nervous system							
Circulatory system							
Respiration							
The central nervous system							
Special senses							
Endocrine physiology							
Urinary Physiology							
Digestive system							

تم الاعتماد في (محضر مجلس قسم الادوية و السموم)
جلسة رقم (1) بتاريخ 2019-9-10