

ABOU BEKR BELKAID UNIVERSITY  
TLEMCCEN  
FACULTY OF MEDICINE- Dr. B.  
BENZERDJEB  
PHARMACY DEPARTMENT



جامعة أبو بكر بلقايد - تلمسان  
كلية الطب - د. ب. بن زرجب  
قسم الصيدلة

## PHYSIOLOGIE SYLLABUS

**Module:**Physiologie

<b>Teaching year:</b>	First year - Third trimester-
<b>Code:</b>	P110
<b>Credits:</b>	40 Hours (30 H for theory courses +10 H for practice session)
<b>Cours type:</b>	Fundamental science
<b>Setting:</b>	Amphitheater + Physiology laboratory
<b>In charge of the module:</b>	<b>Dr Nesrine BOUABDALLAH</b>
<b>Grade:</b>	MA (Assistant Professor in internal medicine)
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### ❖ AIMS

Physiology, from ancient Greek “phúsis” nature, origin, and “logia” study of; is the scientific study of functions and mechanisms in a living system. Human Physiology is the study of how the human body works. It describes the chemistry and physics behind basic body functions, from how molecules behave in cells to how systems of organs work together. It helps us understand what happens in a healthy body in everyday life. Physiology revolves around understanding how the human body maintains a steady state while adapting to outside conditions, a process called homeostasis. Human physiology program is prerequisite for pathophysiology.

### ❖ LERNING OUTCOMES

At the end of these courses, the undergraduate is able to:

- Expound a general knowledge of fundamental concepts in cell physiology.
- Describe the principles of cell homeostasis.
- Explain main pharmacological processes.
- To elucidate abnormal chemical of cell physiology that unbalance the regulatory systems of the human body.

❖ ITEMS

I. LECTURES (THEORY) :

CHAPTER	HOURLY AMOUNT 30Hours	TEACHERS
<b>Introduction to human physiology</b> <b>Homeostasis</b> <b>Hypothalamic-Pituitary axis</b>	<b>01H30</b>	<b>Dr. Nesrine BOUABDALLAH</b> <b>(In charge of the module)</b>
<b>A. Cardiovascular system</b> 1. Cardiac cycle 2. Cardiac hemodynamic 3. Circulation regulation	<b>03 H</b>	<b>Dr. Adelwahab DJELTI</b>
<b>B. Respiratory system</b> 1. Ventilatory mechanism 2. Alveolar-capillary exchanges and gas transport 3. Breathing regulation	<b>03 H</b>	<b>Dr. Nawel SABER ZENAGUI</b>
<b>C. Nervous system</b> 1. The neuron (transmission of information- Electrophysiology) 2. Synaptic transmission 3. Physiology of the autonomic nervous system 4. Skeletal muscle physiology 5. Neurophysiological bases of sensitivity and motor skills 6. Sleep-language-memory	<b>07 H30</b> 01H30  01H30 01H30 01H30 01H30	<b>Pr. Naziha MEGNOUNIF-CHIALI</b>
<b>D. Nutrition-metabolism</b> 1. Food ration 2. The major metabolic pathways	<b>01 H30</b>	<b>Pr. Naziha MEGNOUNIF-CHIALI</b>
<b>E. Endocrine reproduction system</b> 1. Growth hormone 2. Thyroid 3. Adrenal cortex 4. Male gonads 5. Female gonads 6. Pregnancy lactation-contraception	<b>07 H30</b> 01H30 01H30 01H30  01H30 01H30	<b>Dr. Nesrine BOUABDALLAH</b>     <b>Dr. Loubna BOUHMAMA</b>
<b>F. Digestive system</b> 1. Oral-esophageal phase of digestion 2. Gastric phase of digestion 3. Intestinal digestion phase	<b>03 H</b>	<b>Pr. Amal ETCHIALI</b>
<b>G. Urinary system</b> 1. Glomerular filtration. 2. Tubular function. 3. Urination	<b>03 H</b>	<b>Dr. Adelwahab DJELTI</b>

❖ **ASSESSMENT METHODS AND CRITERIA**

- Coefficient : 2
- 01 Theory exam by QCM (multiple choice quiz)
- 01 Practical test

❖ **CREDIT HOURS**

01H30twice a week

**II. PRACTICE SESSIONS (10 Hours)**

1. Blood pressure measurement
2. Electrocardiogram

❖ **REQUIRED PAPER**

- One electronic handout is sent for each chapter.

❖ **BIBLIOGRAPHY**

- Physiologie, OPU, Pr A. Ghouini
- Physiologie humaine et physiopathologie - Les fondements de la médecine (Gillian Pocock, Christopher D. Richards etc.)
- Physiologie humaine (Bernard Lacour, jean-Paul Belon)
- Neurophysiologie (Jean Francois Vibert) 2019.
- Physiologie humaine – Vander. Les mécanismes du fonctionnement de l'organisme (Hershel Raff, Arthur J. Vander, Eric P. Widmaier, Kevin T. Strang) 2013.
- Principles of Neural Science, Sixth Edition by Eric R. Kandel, John D. Koester, Sarah H. Mack and Steven A. Siegelbaum 2021.