

**DEMOCRITUS UNIVERSITY OF THRACE**  
**DEPARTMENT OF PHYSICAL EDUCATION & SPORT SCIENCE**

*UNDERGRADUATE PROGRAM OF STUDY*

**COURSE TITLE:**

Physiology
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**COURSE CODE:**

N117
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**ECTS CREDITS**

4
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**RESPONSIBLE PROFESSOR:**

NAME	Savvas Tokmakidis	
POSITION	Professor	
SECTOR	Sports Training Theory and Application	
OFFICE	B 2-9	
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CO-INSTRUCTORS	-	

**SEMESTER:**

1ST  2ND  3RD  4TH   
5TH  6TH  7TH  8TH

**COURSE TYPE:**

OBLIGATORY   
DIRECTION   
SPECIALIZATION   
PREREQUIZITE FOR SPECIALIZATION   
ELECTIVE (*OPEN*)

**HOURS (per week):**

2
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**DIRECTION**

*(only for 3<sup>rd</sup> & 4<sup>th</sup> year courses)*

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**SPECIALIZATION (only for 3<sup>rd</sup> & 4<sup>th</sup> year courses)**

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**LANGUAGE OF TEACHING:**

GREEK

ENGLISH

**AIM OF THE COURSE** (*content and acquired skills*)

The aim of the 'Physiology' course is to provide basic knowledge on the function of the human body with more emphasis placed on systems important for exercise science i.e. cardiovascular system, respiratory system, metabolism and neuromuscular system.

**COURSE CONTENTS** (*outline – titles of lectures*)

1. Introduction to Physiology – Cell physiology
2. Functions and metabolism of the cell
3. The neuron – Neural impulse transmission
4. Neurophysiology
5. Neuromuscular system
6. Cardiovascular system
7. Respiratory system
8. Lab I
9. Lab II
10. Kidney physiology
11. Gastrointestinal system
12. Endocrine system
13. Thermoregulation

**TEACHING METHOD** (*lectures – labs – practice etc*)

- Lectures
- Laboratory practice

**ASSESSMENT METHOD(-S)**

- Mid-term exams
- Final exam

**LEARNING**

Upon the completion of this course the student will learn:

- The function of cells, tissues, organs and systems along with the function of regulatory systems.
- The interaction of the body under different environmental conditions.
- The function of physiological systems which are important during exercise i.e. the cardiovascular system, the respiratory system, metabolism and neuromuscular system.

**LEARNING - CONTINUED**

<i>Learning Outcomes</i>	<i>Educational Activities</i>	<i>Assessment</i>	<i>Students Work Load (hours)</i>
Knowledge of the function of cells, tissues, organs and systems along with the function of regulatory systems.	Lectures	Mid-term and final exams	30
Knowledge of the interaction of the body under different environmental conditions	Lectures	Mid-term and final exams	30
Understanding the function of physiological systems which are important during exercise i.e. cardiovascular system, respiratory system, metabolism and neuromuscular system.	Lectures and laboratory practice	Mid-term and final exams	60
		<b>TOTAL</b>	<b>120</b>

**OBLIGATORY & SUGGESTED BIBLIOGRAPHY:**

1. Hansen J, Koeppen B. (2004). Atlas of Human Physiology. Paschalidis Editions, Athens.
2. Sofiadis N., Khasabov G.A. (2000). Human Physiology. University Studio Press, Thessaloniki.
3. Vander A., Sherman J., Luciano D., Tsakopoulos M. (2001). Human Physiology. Paschalidis Editions, Athens.