

Subject: Physiology of Physical Effort

GENERAL INFORMATION

Organization unit	Faculty of Physical Education Chair of Biomedical Sciences Chairman: prof. Andrzej Mastalerz
Course name	Physiology of Physical Effort
Subject code	21/1/II/PE
Teaching language	English
Type of subject (obligatory/ facultative)	Obligatory
Level of studies (eg. bachelor, master)	Master
Study year	1
Semester	2
ECTS points	4
Professor	dr hab. Piotr Żmijewski, prof. AWF
Studies program in which the subject is realized	2024-2026
Method of realization (stationary/ distance learning)	Stationary
Prerequisites	Basic knowledge of human physiology, anatomy and biochemistry

DETAILED INFORMATION

Course aims and objectives

To provide students with a theoretical foundation in the fundamental mechanisms governing the functioning of human body systems.
 To develop an understanding of how individual cells and organs interact to influence overall body function.
 To equip students with knowledge of the basic mechanisms that maintain physiological homeostasis.
 To introduce students to key physiological measurements and methods used to assess body function.

Main topics

No	Topic
	Lectures/classes



1.	Classifications of physical exercises.
2.	Skeletal muscle: structure and function.
3.	Nervous control of muscular movement.
4.	Pulmonary responses to exercise.
5.	Cardiovascular responses to exercise.
6.	Bioenergetics - Energy sources. Measurement of energy expenditure.
7.	Physical capacity.
8.	Direct measurement of maximum oxygen uptake, Indirect methods of evaluation of aerobic capacity.
9.	Physiological effects of physical training.
10.	Classifications of physical exercises and training

CONDITIONS FOR PASSING CLASSES:

The completion of all outstanding work resulting from absence from classes is mandatory. Missed content must be made up by preparing a summary or presentation covering the topics discussed during the missed classes.
The final grade is based on an assessment of knowledge and skills.

1 ECTS point = 30 hours students work (contact + self study)

TYPES OF CLASSES	HOURS
1. Contact classes	30
2. Students' preparations of the presentations	30
3. Self study as preparation to the written exam	30
4. Self study as reading text prepared by the teacher	30
Total = 120 hours- ECTS points 4	

Author of the class card:	Name, surname and email
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