SYLLABUS FOR 2023/2024 ENROLLMENT

GENERAL INFORMATION

1. Name of the course

Exercise physiology

2. Name of the faculty

Department of Tourism and Recreation

3. Level of education

First-cycle studies

4. Number of ECTS credits

3

5. Number of hours per semester

semester	lecture	classes	lab./flc	prj./pc	self-study	internship
I	15		15			

6. Language of instruction: English

7. Lecturer

Marian Stelmach - PhD

DETAILED INFORMATION

8. Access requirements

1. Knowledge of the basic concepts of biology
2. Basic knowledge of the structure and functions of the human body

9. Objectives of the course

C1 To learn the physiological mechanisms to improve physiological function for better health or physical performance

C2 To learn the basic methods for assessing the functional state of the human body, physical fitness and health

C3 Acquisition of skills to perform measurements of basic physiological parameters and indices at rest and during exercise

10. Field-specific learning outcomes in terms of knowledge, skills and social competences

A student who successfully passed the course:		reference to field-specific learning outcomes
KNOWLEDGE		
EU01	He/she knows and understands to an advanced level various phenomena of social sciences, humanities, exact sciences, natural sciences and physical culture and the practical application of this knowledge in professional activity related to the major	K_W01
EU02	The student knows and understands conceptual categories and terminology in social sciences, humanities, sciences, natural sciences and physical culture as well as the practical application of this knowledge in professional activity related to the major	K_W02
EU03	The student knows and understands the complexity of the structure and functions of the human organism.	K_W06
EU04	He knows and understands to an advanced degree the concepts and psychosocial mechanisms related to health and its	K_W07

	protection, including various forms of recreation, dietary recommendations and functioning in the natural environmentand functioning in the natural environment	
	SKILLS	
EU05	Can identify human individual needs in tourism and recreation in various aspects: related to health, natural, economic, cultural and social phenomena connected with them	K_U01
EU06	Can use specialized knowledge to collaborate with other functional areas in typical professional situations	K_U02
EU07	Can communicate using different communication techniques in the environment and other environments, using available sources of information including electronic sources	K_U04
EU08	Can use IT technologies to collect, store, analyse and critically evaluate the data	K_U05
	SOCIAL COMPETENCES	
EU09	Is ready to organise and lead the work of teams and organisations within and outside the work environment	K_K01
EU10	Is ready to develop a level of physical fitness necessary for learning and performance of professional tasks	K_K03

11. Programme content

Form of the activity – Lecture

1) Introduction to exercise physiology
2) Locomotor system - structure and function
3) Bioenergetics and exercise metabolism
4) The physiological systems - structure and control of movement
5) The physiology of health and sports training
6) Physiology of health and fitness

Form of the activity – lab.

1) Circulatory responses to exercise - structure and function of the cardiovascular system.
2) Measurement and evaluation of basic parameters of the cardiovascular system.
3) Respiration during Exercise - structure and function of the respiratory system.
4) Laboratory Assessment of Human Performance

12. Didactic tools/methods

1. Presentations
2. Laboratory workshop
3. Didactic films
4. Problem solving
5. Consultations

13. Methods of assessment

1. Evaluation of the preparation for the classes - participation in the discussion
2. Preparation of the reports of the laboratory tasks
3. Inter-semester colloquium
4. Final QUIZ

14. Student workload

Form of activity	number of hours
1. Classes with direct participation of the teacher and consultations	40
2. Student workload	35
sum	75

Total number of ECTS credits	3

15. Literature

Basic literature:

1. Powers, S. K., & Howley, E. T. (2011). Exercise physiology: Theory and application to fitness and performance. Tenth edition. New York: McGraw-Hill.
2. Plowman, S. A., & Smith, D. L. (2017). Exercise physiology for health, fitness, and performance. Fifth edition. Boston: Allyn & Bacon.
3. Bushman, B. A. (2017). Complete guide to fitness & health. Second edition. Champaign, IL: Human Kinetics

Supplementary literature:

1. Farrell PA., Joyner MJ., Caiozzo V. (editors), Advanced Excercise Phisiology 2nd Edition, ACSM Philadelphia 2013
2. https://www.acsm.org/read-research
3. https://www.physiology.org/publications/news?SSO=Y

16. Forms of assessment - details

Conditions for obtaining course credit:

Requirements for obtaining credit for the course:

The course ends with a pass mark. Percentage distribution of assessed effects in categories knowledge, skills, social competences: W - 80%, U - 15%, K - 5%.

The student receives a final mark credit based on

- the level of preparation and activity during laboratory classes,
- submission of all obligatory protocols from laboratory classes, including the protocol of the personal physical fitness test with the Finnish walk test
- successful completion of an inter-semester colloquium
- a written test to check the student's knowledge consisting of 60 single-choice questions covering the topics of the lectures, laboratories and scientific news related to physical exercise and health - duration of the test 60 minutes
- A pass mark is achieved when 60% of the answers are positive.

Scoring: each question is graded on a scale from 0 to 1 point - maximum student can get 60 points, minimum 30 points.

- 0 - 30 points - unsatisfactory (2.0)
- 36 - 40 sufficient (3.0)
- 41 - 45 sufficient plus (3.5)
- 46 - 50 good (4.0)
- 55 - 55 good plus (4,5)
- 55 - 60 very good (5.0)

17. Other useful details concerning the course

1. Direct information about the issues of classes and a program content is provided by the teacher during classes and during office hours
2. Classes will be held at John Paul II University in Biała Podlaska or online
3. Classes will be held in accordance with the current schedule
4. Office hours will be held in accordance with the applicable schedule