

CLASS CARD

DIAGNOSTICS IN SPORT	Study plan code	ECTS
ENVIROMENTAL CONDITIONS INFLUENCING SPORTS TRAINING AND COMPETITION	SDII- 26	2

Educational profile	general	
Faculty / field of studies	Physical Education / Sport	
Organization unit	Department of Theory of Sport	
Level of studies	Second (master)	
Year, semester	1, 1	
Study language	english	
Method of realization	stationary	-
Form(s) of implementation: lectures /exercises	30/0	-
Method of realization	Written exam	
Type of subject	obligatory	

DIRECTIONAL REQUIREMENTS (previous subjects): anatomy, biochemistry, physiology, theory of sport, theory of training, sport biomechanics, sport pedagogy, sport psychology, sport sociology, recovery, nutritional sciences

STUDY AIMS

C1	To consolidate knowledge in the field of the basic principles related to the theory of sports training. To discuss about modern requirements set in competitive sports, concerning aspects of exercise physiology, regeneration/recovery and biological renewal as well as proper nutrition
C2	To familiarize with the diversity of physical and environmental conditions and their impact on the functioning of the athlete's body
C3	To introduce the changing environmental conditions occurring in different parts of the world, which an athlete may encounter during international training camps and competitions
C4	To familiarize with measurement methods that make it possible to assess the impact of environmental variables on the functioning of an athlete's body
C5	To preparing students for individual planning, ongoing assessment of changes in physiological parameters and implementation of the training process in the context of changing environmental conditions

LEARNING OUTCOMES IN KNOWLEDGE, SKILLS AND SOCIAL COMPETENCES FOR THE SUBJECT

Directional learning outcomes (symbols)	Reference to the universal characteristics of the first degree of PRK level 7 (symbols)	Reference to the universal characteristics of the second degree of PRK level 7 (symbols)	Learning outcomes for the subject	Reference to subject objectives	Reference to education standards
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KNOWLEDGE					
K_W02	P7U_W	P7S_WG	P_W01 Has extensive knowledge of how an athlete's body functions in various environmental conditions.	C1, C2, C5	
K_W04	P7U_W	P7S_WG	P_W02 Knows and understands the factors that modify reactivity to physical training and the course of regeneration processes.	C1, C4	
K_W07	P7U_W	P7S_WK	P_W03 Knows how and where to look for the information on specific environmental and organizational conditions related to sports training and competition.	C4, C5	
SOCIAL COMPETENCES					
K_K01	P7U_K	P7S_KK P7S_KR	P_S01 Collaborates with other units in achieving goals arising from various forms of sports activity.	C4, C5	
K_K02	P7U_K	P7S_KO P7S_KR	P_S02 Is able to think and act in a creative way in the scientific research, educational and training process.	C4, C5	

SUBJECT PROGRAM CONTENT DIVISION BY FORMS OF IMPLEMENTATION

FORM OF LECTURES - lecture topic		Reference to subject-specific learning outcomes
W_1-4	Familiarizing students with the basic principles of planning and implementing sports training. Presenting students with the issues of sports competition in biomechanical and physiological terms	P_W01
W_5-12	Types of environmental conditions that may have a significant impact on the quality parameters of training and sports competition	P_W01 P_W02
W_13-18	Circadian rhythm definition and factors influencing its changes. The impact of the "Jet Lag" effect on physiological responses during movement across time zones	P_W01 P_W02
W_19-24	Sports diagnostics and its role in the context of physiological changes caused by the influence of environmental factors on the athlete's body	P_W01 P_W02 P_S01 P_S02

W_25-30	Planning trips to sports camps and competitions, periodization and training control taking into account variable environmental conditions.	P_W01 P_W02 P_S01 P_S02
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PLANNED METHODS/FORMS/TEACHING MEANS

Program Content	Teaching methods/forms
W1-W28	Auditorium, problem-solving lecture, discussion.
W29-30	Colloquium – written exam
Teaching aids: computer, multimedia projector, thematic presentations, Microsoft 365 platform with Office applications	

METHODS OF VERIFYING THE ASSUMED LEARNING OUTCOMES ACHIEVED BY THE STUDENT

Learning outcome for the subject	Evaluation methods
P_W01, P_W02, P_W03	Student activity during problem-solving discussion
P_W01-P_W03, P_S01-02	Student activity, written exam – defense

CONDITIONS FOR PASSING CLASSES:

attendance at classes and written exam (project)

LITERATURE

1. Bompa T., Haff G. Pwriodization Theory and Methodology of Training. Human Kinetics, 2009.
2. Alonso JM Bringing the games to the world II – environmental challenges to athlete health and performance in the heat. Aspetar Sports Medicine Journal, 2020
3. <https://doi.org/10.5114/biol sport.2023.124842>
4. <https://doi.org/10.3390/ijerph18189700>
5. Daniel Tang, K.H. (2021). A review of the association between environmental factors and athletic performance. Journal of Specific Sport Science, 1(1), 21-30
6. Wilson, Brian & Millington, Brad (2020). Sport and the Environment. In Jay Scherer & Brian Wilson (Eds.), Sport and Physical Culture in Canadian Society (pp. 330-354). Toronto: Pearson.
7. [10.3390/atmos10100572](https://doi.org/10.3390/atmos10100572)
8. [dx.doi.org/10.12804/revsalud12.1.2014.07](https://doi.org/10.12804/revsalud12.1.2014.07)
9. <https://doi.org/10.1007/s40279-019-01165-y>
10. <https://doi.org/10.1007/s40279-021-01502-0>

STUDENT WORKLOAD

Full-time studies		Type of activity
Number of hours to complete the activity	Number of ECTS points	
30	1,2	Activities requiring direct participation of academic teachers (total)
30/-		a) Lectures/exercises
		b) Other contact hours with the teacher, consultations
20	0,8	Other forms of classes/education to achieve the intended learning outcomes (in total)
5		a) Familiarization with the recommended literature
5		b) Collecting materials for the project
		c) Preparation of presentation and description
5		d) Studying teaching materials
		e) Developing one's own skills/improving technical skills
5		f) Preparation for a test/exam
50	2	Total hours/ECTS points

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