



Nutrition in Sports

1. IMPRINT

Academic Year	2023/2024
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical sciences
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	Non-compulsory
Form of verification of learning outcomes	Credit
Educational Unit / Educational Units	Department of Social Medicine and Public Health Medical University of Warsaw 3 Oczki St, 02-007 Warsaw Phone: 22-621-52-56, 22-621-51-97 E-mail: zmsizp@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Prof. Aneta Nitsch – Osuch, MD, PhD
Course coordinator	Anna Jagielska, MD, PhD
Person responsible for syllabus	Anna Jagielska, MD, PhD, e-mail: anna.jagielska@wum.edu.pl
Teachers	Anna Jagielska, MD, PhD Aleksandra Kozłowska, MSc, PhD

2. BASIC INFORMATION

Year and semester of studies	I-V year, summer and winter semester	Number of ECTS credits	2.00
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FORMS OF CLASSES	Number of hours	ECTS credits calculation
Contacting hours with academic teacher		
Lecture (L)		
Seminar (S)	30 (e-learning)	1.00
Discussions (D)		
e-learning (e-L)		
Practical classes (PC)		
Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	30	1.00

3. COURSE OBJECTIVES

O1	The principles of nutrition in physical activity.
O2	The relationship between nutrition and physical performance of the body.
O3	Basics of dietary advice for people practicing sports.

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING

Code and number of the effect of learning in accordance with standards of learning	Effects in time <i>(in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>
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Knowledge – Graduate* knows and understands:

B.W.20	The basis of stimulation and conduction in the nervous system and higher nervous function, s well as physiology of striated and smooth muscles and blood functions
B.W.21	Is familiar with the function and regulation of all organs and systems of the human body, including cardiovascular and respiratory systems, digestive and urinary tracts and skin. Understands the dependencies between them.
C.W.48	The consequences of vitamin's and microelement's deficiencies or overdose.
C.W.50	The consequences of poor nutrition, including prolonged starvation, excessive food intake and an unbalanced diet
D.W.23	Is familiar with the basics of evidence-based medicine.
G.W.1	Knows the methods for assessing the health status of individuals and populations, various systems of classification of diseases.

G.W.2	Knows ways of identification and examination of risk factors, the advantages and disadvantages of different types of epidemiological studies and measurements for assessing the cause - outcome effect.
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Skills– Graduate* is able to:

B.U.7	Performs Simple tests to assess human body function as a stable system (exercise stress test), interprets the outcomes of the basic physiological variables.
B.U.9	Operate simple measuring instruments and assess the accuracy of performed measurements.
D.U.1	Include in the therapeutic process the subjective needs and expectations of the patient resulting from socio-cultural conditions
D.U.2	Notice the signs of unhealthy and self-destructive behavior and react appropriately to them.
E.U.16	Plan diagnostic, therapeutic and prophylactic procedures.
G.U.2	Collect information on the presence of risk factors for communicable and noncommunicable disease and plan prevention plans at different levels.

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING

Number of effect of learning	Effects of learning in time
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Knowledge – Graduate knows and understands:

K1	Knows the consequences of improper nutrition, including prolonged starvation, overeating and unbalanced diet.
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Skills– Graduate is able to:

S1	Provides direction of biochemical processes, depending on the cell energy status.
S2	Collect information on the presence of risk factors for communicable and noncommunicable disease and plan prevention plans at different levels.
S3	Performs simple tests and measurements of the health status, interprets the outcomes of the basic physiological variables.
S4	Recognizes self deficits and educational needs, plans its own activity.
S5	Critically examines the medical references, including local and foreign literature, draws conclusions based on the available literature
S6	Trying to avoid making a medical error in their own activities.

Social Competencies – Graduate is ready for:

SC1	
SC2	

6. CLASSES

Form of class	Class contents	Effects of Learning
(e-L) seminar 1	Adaptation of the human body to exercise – Anna Jagielska, MD, PhD	B.W.20-21, C.W.48, C.W.50, , D.W.23, G.W.1-2, B.U. 7, B.U.9, D.U.1-2, G.U.2, K1, S1-8
(e-L) seminar 2	Types of training – Anna Jagielska, MD, PhD	B.W.20-21. C.W.48, C.W.50, D.W.23, G.W.1-2, B.U.7,B.U.9, D.U.1-2, G.U.2, K1, S1-8
(e-L) seminar 3	Sources of energy in physical activity - Aleksandra Kozłowska, MSc, PhD	B.W.20-21. C.W.48, C.W.50, D.W.23, G.W.1-2, D.U.1-2, E.U.16, G.U.2, K1, S1-8
(e-L) seminar 4	Diet, liquids, and supplements in sports - Aleksandra Kozłowska, MSc, PhD	B.W.20-21. C.W.48, C.W.50, D.W.23, G.W.1-2, D.U.1-2, E.U.16, G.U.2, K1, S1-8
(e-L) seminar 5	Environment and physical capacity – Anna Jagielska, MD, PhD	B.W.20-21. C.W.48, C.W.50, D.W.23, G.W.1-2, D.U.1-2, E.U.16, G.U.2, K1, S1-8
(e-L) seminar 6	The importance of physical activity at different stages of human life – Anna Jagielska, MD, PhD	B.W.20-21. C.W.48, C.W.50, D.W.23, G.W.1-2, B.U.9, D.U.1-2, E.U.16, G.U.2, K1, S1-8
(e-L) seminar 7	Nutrition during the competition - Aleksandra Kozłowska, MSc, PhD	B.W.20-21. C.W.48, C.W.50, D.W.23, G.W.1-2, D.U.1-2, , G.U.2, K1, S1-8
(e-L) seminar 8	Individual evaluation of the energy balance – Anna Jagielska, MD, PhD, Aleksandra Kozłowska, MSc, PhD	B.W.20-21. C.W.48, C.W.50, D.W.23, G.W.1-2, B.U.7 B.U.9, D.U.1-2, G.U.2, K1, S1-8
(e-L) seminar 9	Individual assessment of diet– Anna Jagielska, MD, PhD, Aleksandra Kozłowska, MSc, PhD	B.W.20-21. C.W.48, C.W.50, D.W.23, G.W.1-2, B.U.7 B.U.9, D.U.1-2, G.U.2, K1, S1-8
(e-L) seminar 10	Individual evaluation of nutritional status– Anna Jagielska, MD, PhD, Aleksandra Kozłowska, MSc, PhD	D.W.23, G.W.1-2, B.U.7 B.U.9, D.U.1-2, E.U.16, G.U.2, K1, S1-8

7. LITERATURE

Obligatory

1. Medicina Sportiva Practica (www.medicinasportiva.pl)
2. Journal of International Society of Sports and Nutrition
3. Exercise physiology. Energy, Nutrition and Human Performance. McArdle WD i wsp. LWW wyd. 6.

Supplementary

1. Modern nutrition in health and disease. pod. red. ME Skills i wsp., LWW, 10th edition (wybrane rozdziały)
2. Diet, physical activity and cardiovascular disease prevention in Europe. European Heart Network. <http://www.sante.public.lu/publications/maladies-traitements/accident-vasculaire-cerebral/diet-physical-activity-cardiovascular-disease-prevention-europe/diet-physical-activity-cardiovascular-disease-prevention-europe.pdf>

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
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B.W.20-21, C.W.48, C.W.50, D.W.23, G.W.1-2, B.U.7, B.U.9, D.U.1-2, E.U.16,G.U.2, K1, S1-8	1. Written reports 2. Test (MCQ)	1. credit 2. >60% of correct answers
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9. ADDITIONAL INFORMATION

Link to e-learning will be sent by mail to MUW student email account ONLY. Access to e-learning will be available from 2nd till 15th week of semester.

Students are obligatory to check MUW student email account as all information are sent only by formal MUW mails.

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ATTENTION

The final 10 minutes of the last class of the block/semester/year should be allotted for students to fill out the Survey of Evaluation of Classes and Academic Teachers