- 1. Course title: Human nutrition and health promotion.
- 2. Type of course: Lectures and regular classes
- 3. Form of evaluation: Credit with grade. Lectures: single-choice test (minimum 51% of the required knowledge); classes: providing correct reports on nutritional analyses. Grading scale: 51% grade 3; 71% grade 4; 91% grade 5. To pass the course, a student must achieve all of the above learning outcomes.
- 4. Proposed semester: winter
- 5. Course hours: lectures (10hrs), classes (10hrs)
- 6. Syllabus: Lectures: 1. Energy balance and its components. Methods of measuring the total energy expenditure (TEE) (2hrs); 2. Protein in human nutrition; classification, digestion, metabolism and the role of proteins. Nutritional recommendations for physically active people (2hrs); 3. Carbohydrates in human nutrition; classification, digestion, metabolism and the role of carbohydrates. Nutritional recommendations for physically active people (2hrs); 4. Fat metabolism, sources of fatty acids in food products. Dietary recommendation for consuming fats (2hrs); 5. The role of vitamins and minerals in rational nutrition. Oxidative stress. Food products as a source of antioxidants. Acid- base balance. (1hrs); 6. Principles of proper hydration of the body (1hrs). Classes: 1. Characteristics of energy processes in the body. Determining the level of individual basal metabolic rate (BMR) and total energy expenditure (TEE) (2hrs); 2. The energy value of food and meals. Calculation of the caloric value of a standard diet (2hrs); 3. Calculation of individual macronutrient requirements (2hrs); 4. Analysis of the daily food ration considering the supply of protein, carbohydrates, fiber, sucrose, fats, fatty acids, and cholesterol (2hrs); 5. Quantitative assessment of the supply of selected vitamins and minerals in the students' usual diet (2hrs)
- 7. Learning outcomes: The student knows the functional and physiological properties and sources of nutrients as well as the health consequences of their unbalanced supply. Explains the role of rational nutrition in maintaining health and optimal physical fitness. The student can use the tables of the nutritional value of selected food products and dishes. Can make a quantitative and qualitative evaluation of the diet and can determine individual needs for energy, proteins, fats and carbohydrates for people of all ages. He is focused on enriching nutritional knowledge and caring for a healthy diet. The student is aware of the importance of a healthy diet in maintaining health.
- 8. Qualifications: The student has the knowledge and skills in the field of human nutrition and health promotions, which allows him to assess the daily energy expenditure and daily food ration using appropriate methods.
- 9. Location: Department of Sports Medicine and Human Nutrition, Institute of Biomedical Sciences
- 10. Lecturer: dr Aleksandra Pieta
- 11. Conditions of realizing classes: group up to 30 students
- 12. The proposed numbers of ECTS points: 3 points
- 13. Possibility of conducting lectures remotely; 50% 10h.