AKADEMIA WYCHOWANIA FIZYCZNEGO
IM. EUGENIUSZA PIASECKIEGO W POZNANIU

DEPARTMENT: DIETETICS

the list of subjects for ERASMUS+ incoming students

FIELD OF STUDY: DIETETICS
LIST OF SUBJECTS FOR 2023/2024

No.	SUBJECT	HOURS/ ECTS	Form of passing
Winter Semester			
02-DT-1-ER-07	Basics of Dietetics (Podstawy Dietetyki)	15/4	Exam/raports
01-WF-1-ER-15	Clinical Nutrition (Żywienie Kliniczne)	20/5	Exam/raports
02-DT-1-ER-03	General and Nutritional Biochemistry (Biochemia Ogólna i Żywności)	15/4	Exam
02-DT-1-ER-01	Sports Dietetics and Supplementation (Dietetyka Sportowa i Suplementacja)	20/5	Exam
02-DT-1-ER-11	Histology of the Digestive System (Histologia Układu Pokarmowego)	15/4	Pass
01-WF-1-ER-08	Nutrition in the Life Cycle (Żywienie w Różnych Okresach Życia)	20/5	Exam/raports
01-WF-1-ER-26	Microbiology in Human Nutrition (Mikrobiologia w Żywieniu Człowieka)	30/6	Exam/raports
01-T-1-ER-11	Allowed and Prohibited Methods of Performance Support In Sport (Dozwolone i Zabronione Metody Wspomagania Wysiłku w Sporcie)	20/5	Exam/raports
01-T-1-ER-12	Immunodietetics (Immunodietetyka)	20/5	Exam/raports
01-T-1-ER-13	Nutrition in the prevention and treatment of obesity (Żywienie w zapobieganiu i leczeniu otyłości)	20/5	Exam/raports
Summer semester			
02-DT-1-ER-09	Vegetarian Food and Meals in the Prevention and Treatment of Diseases (Potrawy i Posiłki Wegetariańskie w Profilaktyce i Leczeniu Chorób)	15/4	Pass
02-DT-1-ER-04	Sports Nutrition (Żywienie w Sporcie)	15/4	Pass
02-DT-1-ER-10	Food and Waterborne Parasitology (Parazytologia w Żywieniu)	15/4	Pass
01-WF-1-ER-16	Nutrition in Extreme Sports, Qualified Tourism and Different Climatic Conditions (Żywienie w Sportach Ekstremalnych, Turystyce Kwalifikowanej i Różnych Warunkach Klimatycznych)	20/5	Exam/raports
01-WF-1-ER-17	Methodological and Ethical Aspects of Conducting Human Studies (Metodologiczne i Etyczne Zagadnienia w Badaniach z Udziałem Ludzi)	10/2	Project

01-WF-1-ER-18	**World Cuisines (Kuchnie Świata)**	**15/4**	**Pass**
01-WF-1-ER-19	**Nutritional Support for Fertility and Reproductive Health (Żywieniowe Wspomaganie Płodności i Zdrowia Prokreacyjnego)**	**15/4**	**Exam/raports**
02-DT-1-ER-08	**Nutritional assessment with elements of anthropometry (Ocena stanu odżywienia z elementami antropometrii)**	**15/4**	**Pass**

OBLIGATIONS

Classes for ERASMUS Incoming Students

All Incoming Students are obliged to respect the following rules:

1. **Students should establish/update** the list of classes/lectures to attend (learning agreements) as soon as possible (within one month of their arrival to Poznań). Student must not make changes in this document during the semester or shortly before the exams because it is the basis for preparation of an Exam Card.

2. Student must not stop attending **classes/lectures during the course**. **Institutional and Departmental Coordinator and teacher responsible for it should be informed earlier.**

3. Students should come to classes run by Polish teachers **on time**.

4. Within every chosen course an Erasmus Student has the maximum of 15 class-hours of **lectures** (in English) and, besides that, participates in some practical classes together with the Polish students. We offer a **module of subjects in English** with our academic teachers who are responsible for the subject and are obliged to do their best to help students. The module is based on proposals from incoming students (their Learning Agreements). Whether a course will be offered in English is subject to student demand (min. 50% of incoming students). For financial reasons **we can offer a MAXIMUM of 10 subjects per semester from each faculty and 5 subject for physiotherapy students (no more).**

5. In order to receive credits for the courses an Erasmus Student should see the teachers and present the **Exams Card** available from the Institutional Coordinator at the Erasmus+ Programme Office. This form is the basis for the preparation of the Transcript of Records which will be sent directly to the coordinator at the partner institution not earlier than one month after the end of semester.

6. In case of **any problems** an Erasmus Student should immediately contact his/her Polish partner-student, the Institutional or Departmental Coordinator.

7. According to the Bilateral Agreement signed with your university, the IRO will confirm the real time of your study only.

Subject	**PODSTAWY DIETETYKI** **BASICS OF DIETETICS**
Unit of AWF	**Department of Sports Dietetics /Zakład Dietetyki Sportowej**
Teacher's name	**Paulina Nowaczyk, PhD**
ECTS points	**4**
Number of hours	**15**
Methods of estimation	**Exam/raports**
Effects/results of education	*This course provides students with a basic knowledge and practical skills in diet planning for health prophylaxis in various population groups, as well as basics in nutritional support and treatment of selected health conditions.* *The aims of the course are:* *familiarizing students with the basic rules of estimating energy-, macronutrients-, vitamins- and minerals requirements in various population groups,* *familiarizing students with the basic rules of diet planning and evaluation for various population groups,* *familiarizing students with basics of etiopathology, risk factors and nutritional treatment in selected health conditions and diseases.*
Topics of the classes	*1. Estimating energy and macronutrients needs for various population groups. Nutritional recommendations on vitamins and minerals intake in various population groups – various levels of dietary guidelines.* *2. Basic rules of diet planning and evaluation.* *3. Diet planning in prevention of diet-related diseases in various population groups.* *4. Diet planning in prevention and treatment of overweight and obesity.* *5. Diet planning in prevention and treatment carbohydrate metabolism disorders.* *6. Diet planning in prevention and treatment lipid metabolism disorders.*
Recommended literature	*1. Gandy J. Manual of Dietetic Practice. 6th Edition. Athenaeum Uitgeverij 2019.* *2. Webster-Gandy J., Madden A., Holdsworth M. Oxford Handbook of Nutrition and Dietetic. Oxford University Press 2020.* *3. Scientific papers publish in high-impacted journals recommended by teacher.*

Subject	**ŻYWIENIE KLINICZNE** **CLINICAL NUTRITION**
Unit of AWF	**Department of Sports Dietetics /Zakład Dietetyki Sportowej**
Teacher's name	**Krzysztof Durkalec-Michalski, Ass. Prof.**
ECTS points	**5**
Number of hours	**20**
Methods of estimation	**Exam/raports**
Effects/results of education	*This course provides students with the detailed knowledge and practical skills in the field of nutritional prophylaxis and treatment of selected health conditions and diseases.* *The aims of the course are:* – *familiarizing students with etiopathology, risk factors, treatment methods – with special emphasis of nutrition, in selected diseases,* – *gaining the ability of nutritional education and rationalization of nutrition in selected health conditions,* – *gaining the abilities of practical implementation of diet planning in selected diseases and health conditions.*
Topics of the classes	1. *Nutrition and diet planning in hypertension and selected components of metabolic syndrome.* 2. *Nutrition in prophylaxis and treatment of osteoporosis and skeletal disorders.* 3. *Nutritional considerations for injury prevention and recovery.* 4. *Nutrition in selected neurological diseases - Alzheimer's disease, Parkinson's disease, multiple sclerosis, lateral sclerosis, strokes, brain aging, epilepsy.* 5. *Nutrition in selected autoimmune and inflammatory diseases - rheumatoid arthritis, psoriasis, alopecia areata.* 6. *Nutrition in prophylaxis, treatment and recovery in various types of cancer.*
Recommended literature	1. *Katz D., Levitt J., Essel KF., Yeh M-Ch., Summer R., Friedman C. Nutrition in Clinical Practice. Wolters Kluwer Health 2022.* 2. *Marinos E., Ljungqvist O., Stratton R.J., Lanham-New S.A. Clinical Nutrition 2nd Edition. Wiley-Blackwell 2013.* 3. *Sobotka L. Basics in Clinical Nutrition. Galén, spol. s r.o. 2019.* 4. *Antia F.P., Abraham P. Clinical Dietetics and Nutrition 4th Edition. Oxford University Press 2002.* 5. *Scientific papers publish in high-impacted journals recommended by teacher.*

Subject	**BIOCHEMIA OGÓLNA I ŻYWNOŚCI** **GENERAL AND NUTRITIONAL BIOCHEMISTRY**
Unit of AWF	**Department of Physiology and Biochemistry/Zakład Fizjologii i Biochemii**
Teacher's name	**Tomasz Podgórski, PhD**
ECTS points	**4**
Number of hours	**15**
Methods of estimation	**Exam**
Effects/results of education	*To familiarize the students knowledge of the biochemical aspects of the structure and function of cells.* *Mastering the students knowledge on essential metabolic processes in the human body.* *Teach the students a thorough look at the biochemical effects provided dietary nutrients, particularly with regard to the specific person, the nature of work and the possible interactions of nutrition.* *Acquaint the student with nutritional elements, particularly with sports supplements, which may affect on physical performance of athletes.*
Topics of the classes	*An introduction to the subject. Essential minerals in human body. Food sources of essential minerals. The pH scale and the pH values of biological fluids. Determination of some essential minerals in human blood. 3 hours* *Amino acids, proteins. Metabolism of amino acids in rest and during the exercise. Determination of albumin, total protein, ammonia concentrations in the blood. 3 hours* *Carbohydrates. Aerobic metabolism of glucose. The role of glycogen. The structure and food sources of carbohydrates. The taste of some of simple sugars and polysaccharides. 2 hours* *Anaerobic pathways to resynthesize ATP. The role of lactic acid/lactate in athlete's organism. Some eliminations methods of lactate after exercise. Determination of lactate concentration in the blood. 2 hours* *Lipids. Structure, types, food sources, influence on human health. Metabolism of lipids and cholesterol. Determination of total cholesterol concentrations in the blood. 2 hours* *Biochemical aspects of sports supplements.*

	Demonstration of the most popular supplements in the market. 2 hours *Summary of General and Nutritional Biochemistry. A written test. 1 hour*
Literature	*Mathews CK, van Holde KE, Ahern KG. Biochemistry. Addison Wesley Longman, Inc. 2000.* *Maughan RJ, Gleeson M. The Biochemical Basis of Sports Performance. Oxford University Press. 2010.* *MacLaren D. Nutrition and Sport. Elsevier. 2007.* *Hargreaves M. Exercise Metabolism. Human Kinetics. 1995.* *Other biochemistry textbooks and web pages about biochemistry, nutrition, sports exercise and athletes' supplementation.*

Subject	**DIETETYKA SPORTOWA I SUPLEMENTACJA** **SPORTS DIETETICS AND SUPPLEMENTATION**
Unit of AWF	**Department of Sports Dietetics /Zakład Dietetyki Sportowej**
Teacher's name	**Krzysztof Durkalec-Michalski, Ass. Prof.**
ECTS points	**5**
Number of hours	**20**
Methods of estimation	**Exam**
Effects/results of education	*This course provides students with the detailed knowledge and practical skills in the field of nutritional and supplementary support for exercise performance and physical capacity enhancement, body composition regulation:* *1. Understanding and applying the detailed aspects of sports dietetics and supplementation.* *2. Understanding the role of energy balance and availability, nutrients and fluids intake, and possibilities of their regulation in the diet of athletes in various sport disciplines.* *3. Recognizing and implementation of evidence-based nutritional strategies to support athletic training and exercise performance.* 4. *Understanding of the practice and science background and when to refer out to other experts.*
Topics of the classes	*1. Diet planning, practical use of recommendation for nutrients intake, energy balance and RDA in sport practices.* *2. Diet management in strength sports.* *3. Diet management in endurance disciplines.* *4. Diet management in mixed sports disciplines.* *5. Supplementation in sport.* *6. Substances and methods which are permitted, prohibited or banned in sport.*
Recommended literature	*1. Burke L., Deakin V. Clinical Sports Nutrition 5th ed. McGraw-Hill 2015.* *2. Kerksick, C.M.; Wilborn, C.; Roberts, M.D.; et al. ISSN exercise and sports nutrition review update: Research and recommendations. J. Int. Soc. Sports Nutr. 2018, 15: 38.* *3. Kreider R.B. Essentials of Exercise & Sport Nutrition: Science to Practice. Lulu Publishing Services 2019.* *4. Jeukendrup A.E. Sport Nutrition 3rd Edition. Human Kinetics Publishers 2018.* *5. Thomas D.T., Erdman K.A., Burke L.M. American College of Sports Medicine Joint Position Statement. Nutrition and Athletic Performance. Med Sci Sports Exerc. 2016, 48(3): 543-568.*

6. Vitale K, Getzin A. Nutrition and Supplement Update for the Endurance Athlete: Review and Recommendations. Nutrients 2019, 11(6): 1289.

7. Spriet, L.L. Sports Nutrition for Optimal Athletic Performance and Health: Old, New and Future Perspectives. Sports Med. 2019, 49: 99–101.

8. Maughan RJ, Burke LM, Dvorak J, et al. IOC consensus statement: dietary supplements and the high-performance athlete. Br J Sports Med. 2018, 52(7): 439-455.

9. Dunford M., Doyle J.A. Nutrition for Sport Exercise. Cengage Learning, Inc 2021.

10. Mottram D., Chester N. Drugs in Sport. Routledge 2022.

Subject	**HISTOLOGIA UKŁADU POKARMOWEGO** **HISTOLOGY OF THE DIGESTIVE SYSTEM**
Unit of AWF	**Department of Biology and Anatomy/Zakład Biologii i Anatomii**
Teacher's name	**Wojciech Jarosz, PhD**
ECTS points	**4**
Number of hours	**15**
Methods of estimation	**Pass** *(*The test with some multiple choice, and matching)
Effects/results of education	*This course provides students with the detailed knowledge in the field of human histology focused on the digestive system.* *At the end of the course student will be able to:* *1. Describe the microscopic structure of human tissues –their morphological differentiation in relation to the function and location.* *2. Describe the possibility of regeneration of individual tissues.* *3. Describe the role of different types of tissues in structural and functional integrity of human body especially in relation to the role of digestive system.*
Topics of the classes	*1. Introduction to histology, methods used in histology.* *2. Microscopy – practical operations on light microscope.* *3. The structure, functions and regeneration of different types of epithelial tissues. Types of intercellular connections.* *4. The structure, functions and regeneration of different types of connective tissues, specific structure and role of adipose tissue.* *5. Blood and lymph: characteristic of plasma and morphological elements: number and structure of erythrocytes – the role of hemoglobin in transport of oxygen, number and structure and functions of leucocytes (lymphocytes, monocytes and granulocytes),* *immunological role of lymphocytes, number structure and functions thrombocytes. The role of blood and lymph.* *6. The structure, functions and regeneration smooth, striated muscle, myocardial fibre* *7. The structure, functions and regeneration of nerves tissue in different part of nervous system; reflexes – conditioned and unconditioned, bisynaptic reflex arc.* *8. Detailed histology of selected parts of digestive system.* *During individual work with microscope in lab students will analyze the structure of selected human tissues and organ*

Recommended literature	*1. Netter's Essential Histology. Ovalle WK and Nahirney PC. Saunders, Elsevier.* *2. Inderbir Singh's Textbook of Human Histology With Colour Atlas and Practical Guide. Neelam Vasudeva , Sabita Mishra. Jaypee B.M.P. New Delhi.*

Subject	**ŻYWIENIE W RÓŻNYCH OKRESACH ŻYCIA** **NUTRITION IN THE LIFE CYCLE**
Unit of AWF	**Department of Sports Dietetics /Zakład Dietetyki Sportowej**
Teacher's name	**Paulina Nowaczyk, PhD**
ECTS points	**5**
Number of hours	**20**
Methods of estimation	**Exam/raports**
Effects/results of education	*This course provides students with a basic knowledge and practical skills in diet planning and management at different stages of life.* *The aims of the course are to:* – *have understanding on the major nutrition-related concerns at particular stages of life cycle,* – *gain skills in nutritional status evaluation at different stages of life,* – *get familiar with foods particularly useful in meeting nutritional needs at different stages of life,* – *gain skills in dietary plans elaboration.*
Topics of the classes	1. *Nutritional recommendations for general population. Normal diet and its modifications. Overview of changes in nutritional needs throughout a life cycle. Basic rules of diet planning and evaluation.* 2. *Preconception nutrition and nutrition during pregnancy.* 3. *Nutrition during the first year of life. Breastfeeding and nutritional needs of mother and of infant.* 4. *Toddlers, preschoolers and school-aged children nutrition* 5. *Adolescents and adults nutrition. Aging and changes in nutritional needs.*
Recommended literature	1. *Rattan S.I. S.,, Kaur G. Nutrition, Food and Diet in Ageing and Longevity. Springer 2022.* 2. *Lammi-Keefe C.J., Couch S.C., Philipson E., Reese E.A. Handbook of Nutrition and Pregnancy. Humana Press Inc. 2010.* 3. *Gandy J. Manual of Dietetic Practice. 6th Edition. Athenaeum Uitgeverij 2019.* 4. *Webster-Gandy J., Madden A., Holdsworth M. Oxford Handbook of Nutrition and Dietetic. Oxford University Press 2020.* 5. *Scientific papers publish in high-impacted journals recommended by teacher.*

Subject	**MIKROBIOLOGIA W ŻYWIENIU CZŁOWIEKA** **MICROBIOLOGY IN HUMAN NUTRITION**
Unit of AWF	**Department of Sports Dietetics /Zakład Dietetyki Sportowej**
Teacher's name	**Katarzyna Serwańska, Ass. Prof.**
ECTS points	**6**
Number of hours	**30**
Methods of estimation	**Exam/raports**
Effects/results of education	*Student defines differences between prokaryotic and eukaryotic organisms.* *Characterizes the life requirements of microorganisms and selects appropriate methods for cultivating microorganisms. Student characterizes the diversity of microorganisms* *in their structure, metabolism, ecology and pathogenicity. Applies techniques to identify microorganisms and determine their number and degree of contamination of food, water, air and surfaces. Student characterizes the natural human microbiota and its relationship with health; explains the mechanisms determining the pathogenicity of microorganisms; understands and explains the essence of the action of antibiotics, disinfectants, preservatives and resistance to them, and performs analyzes in this area. Explains the possibilities of use of microorganisms by humans and the negative aspects of their occurrence in food. Student characterizes the microbiota of raw materials and food products. Student correctly interprets the results of microbiological tests. Applies the rules of occupational health and safety in the laboratory with biological hazards*
Topics of the classes	1. *Structure, morphological and anatomical diversity of prokaryotic microorganisms.* 2. *Basic components of the culture medium. Culture techniques. Growth, propagation, cultivation and identification of microorganisms.* 3. *Influence of physical and chemical factors on microorganisms. Sterilization, disinfection, maintenance (including alternative methods, essential oils and bacteriocins)* 4. *Viruses, viroids and virusoids.* 5. *Natural human microbiota and its impact on the functioning of the body.* 6. *Saprophytic, pathogenic and toxinogenic microorganisms.* 7. *Infectious diseases and poisoning of the digestive tract.* 8. *Antibiotics and chemotherapeutics in food and treatment. Effects of abuse.* 9. *Microorganisms used in food production. Probiotics,*

	Prebiotics and synbiotics. 10. *Undesirable microorganisms in food and their effects on human body.*
Recommended literature	1. *Ray B. and Bhunia A. Fundamental Food Microbiology. 5th Edition, CRC Press, 2013* 2. *Doyle M.P. Food Microbiology: Fundamental and Frontiers, American Society for Microbiology Press, 2013*

Subject	**DOZWOLONE I ZABRONIONE METODY WSPOMAGANIA WYSIŁKU W SPORCIE** **ALLOWED AND PROHIBITED METHODS OF ATHLETIC SUPPORT IN SPORT**
Unit of AWF	**Department of Sports Dietetics /Zakład Dietetyki Sportowej**
Teacher's name	**Krzysztof Durkalec-Michalski, Ass. Prof.**
ECTS points	**5**
Number of hours	**20**
Methods of estimation	**Exam/raports**
Effects/results of education	*This course introduce students with international institutions involved in shaping regulations on substances and methods prohibited/allowed to use in sport, as well as provide them with an up-to-date knowledge of legitimate and safe substances/methods to support physical performance in sport:* 1. *Getting familiar with current and up-to-date lists of substances and methods prohibited in sport.* 2. *Acquiring the knowledge and practical skills of searching reliable information on substances and methods prohibited in sport.* 3. *Familiarizing with an adverse health consequences of using various types of prohibited substances and methods in sport.* 4. *Recognizing and implementation of evidence-based supplementation strategies to support athletic training and exercise performance.*
Topics of the classes	1. *Substances and methods prohibited to use in sport.* 2. *Biomedical side-effects of doping in sport.* 3. *Therapeutic Use Exemptions (TUEs).* 4. *The most famous and discussed doping scandals in sport.* 5. *Allowed pharmacological and supplementation support in sport.*
Recommended literature	1. *World Anti-Doping Code International Standard Prohibited List 2023 and its annual updates.* 2. *Australian Institute of Sport position statement supplements and sports foods in high performance sport August 2022 and its annual update.* 3. *Vitale K, Getzin A. Nutrition and Supplement Update for the Endurance Athlete: Review and Recommendations. Nutrients 2019, 11(6): 1289.* 4. *Maughan RJ, Burke LM, Dvorak J, et al. IOC consensus statement: dietary supplements and the high-performance athlete. Br J Sports Med. 2018, 52(7): 439-455.* 5. *Mottram D., Chester N. Drugs in Sport. Routledge 2022.*

Subject	**IMMUNODIETETYKA** **IMMUNODIETETICS**
Unit of AWF	**Department of Sports Dietetics /Zakład Dietetyki Sportowej**
Teacher's name	**Krzysztof Durkalec-Michalski, Ass. Prof.**
ECTS points	**5**
Number of hours	**20**
Methods of estimation	**Exam/raports**
Effects/results of education	*This course provides students with the theoretical foundations of the immunonutrition, including the knowledge of the impact of nutritional status, diet, and physical activity on functioning of immune system and body homeostasis.* 1. *Familiarizing with the possibilities to modulate the activity and potential of the immune system through interventions with specific nutrients and non-nutritive biologically active ingredients.* 2. *Understanding the impact of the alternated supply of nutrients on modifying the inflammatory or immune response of the body.*
Topics of the classes	1. *Nutritional status & nutrition and functioning of the immune system.* 2. *'Immunosenescence' – 'aging' of the immune system.* 3. *Immunological background of obesity and metabolic syndrome.* 4. *An overview of supplements possessing an immunomodulatory effect.* 5. *Nutrition in the prevention and treatment of upper respiratory tract infections.* 6. *Exercise immunology. Immunonutrition in sport.*
Recommended literature	1. *Rich R.R., Fleisher T.A., Schroeder Jr. H. W., Weyand C.M., Corry D.B., Puck J. M. Clinical Immunology. Principles and Practice. Elsevier 2022.* 2. *Gleeson M., Bishop N., Walsh N. Exercise Immunology. Taylor & Francis Ltd 2013* 3. *Scientific papers published in high-impacted journals recommended by teacher.Mottram D., Chester N. Drugs in Sport. Routledge 2022.*

Subject	**ŻYWIENIE W ZAPOBIEGANIU I LECZENIU OTYŁOŚCI** **NUTRITION IN THE PREVENTION AND TREATMENT OF OBESITY**
Unit of AWF	**Department of Food and Nutrition /Zakład Żywności i Żywienia**
Teacher's name	**Joanna Karolkiewicz Ass. Prof. Anna Gogojewicz Phd**
ECTS points	**4**
Number of hours	**20**
Methods of estimation	**Exam**
Effects/results of education	*The course provides students with detailed knowledge and practical skills in nutrition and physical activity in the prevention and reduction of obesity* 1. *Students will be aware of the role of food and nutrition in health and disease.* 2. *Understanding the metabolic effect of foods on obesity.* 3. *Recognizing and implementation of evidence-based nutritional strategies to body weight reduction* 4. *Understanding of the practice and science background and when to refer out to other experts.*
Topics of the classes	*1. What is Obesity? Causes and Diagnosis.* *2. Obesity in adults: Dietary therapy* *3. What is the effect of specialized diets in obesity reduction .* *4. Tips for healthy food substitutes* *5. Balanced and varied diet with adequate portion sizes.* *6. Specific dietary choices that can help to control weight.* *7. Meal plan and menu for " Obese patient on the go".*
Recommended literature	1. *Laurie E. Bernstein, Fran Rohr, Sandy van Calcar. Nutrition Management of Inherited Metabolic Diseases. Springer Nature Switzerland AG, 2022.* 2. *Rasik M. Parmar; Ahmet S. Can.Dietary Approaches To Obesity Treatment. StatPearls Publishing; 2022.* 3. *Staci Nix McIntosh. Williams' Basic Nutrition & Diet Therapy, 16th Edition. 2021.*

Subject	**POTRAWY I POSIŁKI WEGETARIAŃSKIE W PROFILAKTYCE I LECZENIU CHORÓB** **VEGETARIAN FOOD AND MEALS IN THE PREVENTION AND TREATMENT OF DISEASES**
Unit of AWF	**Department of Sports Dietetics /Zakład Dietetyki Sportowej**
Teacher's name	**Małgorzata Mizgier, PhD**
ECTS points	**4**
Number of hours	**15**
Methods of estimation	*Activity during meetings*
Effects/results of education	*The aim of the course is to familiarize students with the following topics:* *-vegetarian diet in prevention and treatment of diseases* *-the use of a variety of healthy plant based foods in preparing vegetarian dishes* *-the benefits and the risks of using a vegetarian diet*
Topics of the classes	*Vegetarianism and a variety of a plant-based diet* *Vegetarian diet and disease prevention* *Non-meat sources of nutrients* *Vegetarian dishes and recipes* *Food preparation techniques* *Planning a healthy vegetarian diet*
Recommended literature	*1.Ruth A, Torh MS. Nutrition and Diet Therapy. 10th Edition Delmar, Cengage Learning 2011, 2007, 2003* *2.https://nutritionstudies.org/top-10-plant-based-news-stories-and-articles-of-2020/.Accessed 31.03.2021* *3.https://nutritionstudies.org/solving-food-pyramid-mysteries/. Accessed 31.03.2021* *https://www.ncpro.org/pub/file.cfm?item_type=xm_file&id=541304. Accessed 31.03.2021*

Subject	**ŻYWIENIE W SPORCIE** **SPORTS NUTRITION**
Unit of AWF	**Department of Food and Nutrition/Zakład Żywności i Żywienia**
Teacher's name	**Joanna Karolkiewicz, Ass.Prof., Ewa Śliwicka, PhD.**
ECTS points	**4**
Number of hours	**15**
Methods of estimation	**Pass**
Effects/results of education	*This course equips students with the comprehensive knowledge and skills which are essential in order to achieve sports nutritional and athletic performance goals:* *1. Understanding and applying the basic fundamentals of nutrition and sports nutrition.* *2. Identification and usage sound nutrition recommendations for macronutrient intakes among various athletes.* *3. Recognizing and implementation science based nutrition strategies to help athletes with their training and performance.* *4. Understanding of scope of practice and when to refer out to other experts.*
Topics of the classes	*1. Energy balance and body composition in sports and exercise.* *2. Nutritional needs of endurance athletes* *3. Nutritional needs of strength/power athletes* *4. Hydration & fluid replacement for athletes* *5. An overview of sports supplements.*
Recommended literature	*1. Jeukendrup A., Gleeson M. Sport Nutrition an introduction to Energy production and performance. 2nd. Ed. Human Kinetics, Inc., 2010.* *2. Burke L. Practical Sports Nutrition. Human Kinetics, Inc., 2007.* *3. Manore, M., Meyer, N., and Thompson, J.Sport Nutrition for Health and Performance, 2 nd edition, Human Kinetics, Inc., 2009.* *4. Thomas D.T., Erdman K.A., Burke L.M. American College of Sports Medicine Joint Position Statement. Nutrition and Athletic Performance. Med Sci Sports Exerc. 2016, 48(3): 543-568*

Subject	**PARAZYTOLOGIA W ŻYWIENIU** **FOOD AND WATERBORNE PARASITOLOGY**
Unit of AWF	**Department of Biology and Anatomy/Zakład Biologii i Anatomii**
Teacher's name	**Wojciech Jarosz, PhD**
ECTS points	**4**
Number of hours	**20**
Methods of estimation	**Pass** *(*The test with some multiple choice, and matching)
Effects/results of education	*This course provides students with the detailed knowledge in the field of parasitology with focus on food and waterborne parasites. At the end of the course student will be able to:* *1. Describe the taxonomy, morphology, life cycle and symptomatology of water, soil and plant food transmitted parasites.* *2. Describe the taxonomy, morphology, life cycle and symptomatology of meat transmitted parasites.* *3. Describe most commonly used diagnostics procedures in parasitology.* *4. Recognize parasites on microscopic slides.*
Topics of the classes	*1. Introduction to Parasitology. Definition. Effects of the parasite on the host. Host reaction against the parasite.* *2. Main parasites transmitted by water, soil and plants. Relationship between fecal contamination, water and plant food. Species of parasites: Entamoeba histolytica, Giardia intestinalis, Cryptosporidium sp, Fasciola hepatica, Echinococcus sp, Enterobius vermicularis, Ascaris lumbricoides. Taxonomy. Morphology. Life cycle. Clinics.* *Epidemiology. Routes of contamination of food. Prevention and control..* *3. Main parasites transmitted by meat and fish. Toxoplasma gondii, Taenia sp., Trichinella spiralis, Anisakis sp. Life cycle. Clinics. Epidemiology. Routes of contamination of food. Prevention and control.* *4. Zoonoses and zoonotic parasites of public concern. Toxocara canis and Toxocara cati. Taxonomy. Morphology. Life cycle. Clinics.* *5. Diagnostics in parasitology – practice class in laboratory.*
Recommended literature	*1. Parasitic Diseases, Despommier, DD, Griffin, DO, Gwadz, RW, Hotez, PJ, and Knirsch, CA. Parasites Without Borders, 2017. https://parasiteswithoutborders.com/wp-content/uploads/2020/02/PD7thEditionHighResVersion5-11-2019.pdf*

Subject	**ŻYWIENIE W SPORTACH EKSTREMALNYCH, TURYSTYCE KWALIFIKOWANEJ I RÓŻNYCH WARUNKACH KLIMATYCZNYCH** **NUTRITION IN EXTREME SPORTS, QUALIFIED TOURISM AND DIFFERENT CLIMATIC**
Unit of AWF	**Department of Sports Dietetics/Zakład Dietetyki Sportowej**
Teacher's name	**Krzysztof Durkalec-Michalski, Ass. Prof.**
ECTS points	**5**
Number of hours	**20**
Methods of estimation	**Exam/raports**
Effects/results of education	*The course will provide students with knowledge about the basic concerns related to the nutrition in qualified tourism, agritourism and various climatic conditions. Active participation in the classes will:* *1. give the students understanding of health-related risks associated with various forms of tourism;* *2. provide students with theoretical background and practical abilities to implement nutritional and supplementation strategies to reduce risks connected with various types of tourism, as well as to prevent and minimize its health-adverse effects.*
Topics of the classes	*1. Nutrition in hiking and polar tourism.* *2. Planning nutrition in hypoxic conditions and high-mountain tourism.* *3. Nutrition in water tourism and deep-sea diving.* *4. Nutrition management in tropical climate.* *5. Analysis of culinary tourism in Poland and selected locations in the world.* *6. Nutrition management during military missions and space flights.*
Recommended literature	*1. Oktadiana H., Rahmanita M., Suprina R., Junyang P. Current Issues in Tourism, Gastronomy, and Tourist Destination Research. Taylor & Francis Ltd 2022.* *2. Long L.M. Culinary Tourism. The University Press of Kentucky 2003.* *3. Mair M., Wagner D. Culinary Tourism. Products. Regions. Tourists. Philosophy. Verlag Österreich, 2012.* *4. Viscor G., Corominas J.,Carceller A. Nutrition and Hydration for High-Altitude Alpinism: A Narrative Review. Int. J. Environ. Res. Public Health 2023, 20(4), 3186; https://doi.org/10.3390/ijerph20043186.* *5. Scientific papers published in high-impacted journals recommended by the teacher.*

Subject	**METODOLOGICZNE I ETYCZNE ZAGADNIENIA W BADANIACH Z UDZIAŁEM LUDZI** **METHODOLOGICAL AND ETHICAL ASPECTS OF CONDUCTING HUMAN STUDIES**
Unit of AWF	**Department of Sports Dietetics /Zakład Dietetyki Sportowej**
Teacher's name	**Paulina Nowaczyk, PhD**
ECTS points	**2**
Number of hours	**10**
Methods of estimation	**Project**
Effects/results of education	*This course provides students with theoretical introduction and basic practical skills in planning and conducting controlled human studies with special emphasis on dietary and supplementation studies in physically active individuals and athletes.* *The aims of the course are familiarizing students with:* – *theoretical background on planning and conducting human studies, e.g., types of study designs, rules and methods of study sample calculation and selection, tools for dietary evaluation, tools for physical capacity and performance evaluation, etc.* – *bioethical standards in conducting human studies,* – *registry databases for observational and interventional protocols.*
Topics of the classes	1. *The strategy of epidemiological and interventional studies.* 2. *Methods and tools in epidemiological research. Basic principles for designing epidemiological studies.* 3. *Dietary assessment methods in epidemiological studies: strengths and limitations.* 4. *Basics in evaluation of physical capacity and performance in human studies.* 5. *Bioethical standards in conducting human studies.*
Recommended literature	1. *Willet W. Nutritional Epidemiology. Oxford University Press Inc, 2012.* 2. *Thomas G. Research Methodology and Scientific Writing. Springer Nature Switzerland AG 2022.* 3. *The Declaration of Helsinki.* 4. *Oviedo Convention and its Protocols.* 5. *Scientific papers published in high-impacted journals recommended by teacher.*

Subject	**KUCHNIE ŚWIATA** **WORLD CUISINES**
Unit of AWF	**Department of Food and Nutrition /Zakład Żywności i Żywienia**
Teacher's name	**Agnieszka Bilska PhD., Natalia Popierz Rydlewska, PhD**
ECTS points	**4**
Number of hours	**15**
Methods of estimation	**Pass**
Effects/results of education	*This course provides students with the detailed knowledge and practical skills about world cuisines.* *1. Possibilities of using plant and animal products in cooking.* *2. Technology of preparing and serving dishes and meals from cuisines of the world.* *3. Ability to select appropriate raw materials and apply appropriate technologies in the preparation of dishes and meals from world cuisines.*
Topics of the classes	*1. Specifics and specialties of selected cuisines of Asia.* *2. Practical familiarization with food preparation technologies characteristic of Mediterranean cuisine.* *3. Preparation of dishes characteristic of European cuisine.*
Recommended literature	*1. Grace O. Anti-Aging Dishes from Around the World, Skyhorse Publishing 2022.* *2. Katsuyoshi N. Textural Characteristics of World Foods, Wiley 2020.* *3. Solomon C. The Complete Asian Cookbook: New Edition, Hardie Grant Books 2016.* *4. Iglesias López M.T (2019) Culture and Mediterranean Diet International Journal of Nutrition, 3(2),13-21.*

Subject	**ŻYWIENIOWE WSPOMAGANIE PŁODNOŚCI I ZDROWIA PROKREACYJNEGO** **NUTRITIONAL SUPPORT FOR FERTILITY AND REPRODUCTIVE HEALTH**
Unit of AWF	**Department of Sports Dietetics /Zakład Dietetyki Sportowej**
Teacher's name	**Paulina Nowaczyk, PhD**
ECTS points	**4**
Number of hours	**15**
Methods of estimation	**Exam/raports**
Effects/results of education	*The aim of the course is to comprehensively familiarize students with lifestyle factors, including, above all, the role of diet, nutritional status and physical activity in shaping the reproductive health of females and males.* *Within the course students will:* – *learn about the role of nutritional deficiencies and excessive supply of energy and certain nutrients at various stages of ontogenetic development on nutritional status and health, and consequently on determination of the procreative potential of the organism,* – *get the knowledge on the role of early metabolic programming and epigenetic mechanisms on reproductive health in future years,* – *gain the practical ability to plan comprehensive nutritional and supplementation support for improvement of fertility and reproductive health for females and males during the preconception period, as well as for females during physiological pregnancy and with co-occurring diseases.*
Topics of the classes	1. *Overweight & obesity during various stages of life and their impact on reproductive health.* 2. *The influence of nutrients, non-nutritive biologically active ingredients, supplementation and physical activity on the process of spermatogenesis and oogenesis.* 3. *The role of nutrition & nutritional status in functioning of hypothalamic-pituitary-ovarian axis.* 4. *Nutritional support in endometriosis, polycystic ovarian syndrome, insulin resistance, thyroid diseases and hyperprolactinemia.* 5. *Nutrition in pregnancy. Nutritional support treatment in selected pathologies during pregnancy i.e.,. gestational diabetes mellitus, hypertension, constipations and persistent vomiting.*

Recommended literature	1. *Lammi-Keefe C.J., Couch S.C., Philipson E., Reese E.A. Handbook of Nutrition and Pregnancy. Humana Press Inc. 2010.* 2. *Scientific papers publish in high-impacted journals recommended by teacher.*

Subject	**OCENA STANU ODŻYWIENIA Z ELEMENTAMI ANTROPOMETRII** **NUTRITIONAL ASSESSMENT WITH ELEMENTS OF ANTHROPOMETRY**
Unit of AWF	**Department of Food and Nutrition /Zakład Żywności i Żywienia**
Teacher's name	**Joanna Ratajczak, PhD** **Ewa Bryl, MSc**
ECTS points	**4**
Number of hours	**15**
Methods of estimation	*Participation in class activities,* *confirmation of the ability to perform anthropometric measurements, calculate anthropometric indices, and interpret the obtained results*
Effects/results of education	*The student has knowledge of biochemical and questionnaire-based nutritional assessment as well as anthropometric body composition assessment.* *They possess practical skills for conducting anthropometric measurements.* *They can interpret the results and use them for nutritional assessment purposes.*
Topics of the classes	*• Introduction to Nutritional Assessment (4 hours)* *- Biochemical Assessments (Theoretical Discussion)* *- Dietary Questionnaires (Practical Exercises)* *• Anthropometric Body Composition Assessment (4 hours)* *- Measurement Instruments* *- Anthropometric Measurements: Height and Body Mass, Waist and Hip Circumferences, Skinfold Thickness (Practical Exercises)* *- Calculation of Body Fat Percentage Based on Anthropometric Measurements* *• Anthropometric Indices in Nutritional Assessment and Calculating Energy Requirements (Practical Exercises) (3 hours)* *• Advanced Body Composition Assessment Methods – Practical Application of Bioelectrical Impedance Analysis (4 hours)*
Recommended literature	*National Health and Nutrition Examination Survey (NHANES). (2007), Anthropometry Procedures Manual, CDC. https://wwwn.cdc.gov/nchs/data/nhanes/2017-2018/manuals/2017_Anthropometry_Procedures_Manual.pdf* *Kumagai, M., Yahagi, N. (2013). Basal Metabolic Rate. In: Gellman, M.D., Turner, J.R. (eds) Encyclopedia of Behavioral Medicine. Springer, New York, NY. https://doi.org/10.1007/978-1-4419-1005-9_377* *Heaney, J. (2013). Energy: Expenditure, Intake, Lack of. In: Gellman,*

M.D., Turner, J.R. (eds) Encyclopedia of Behavioral Medicine. Springer, New York, NY. https://doi.org/10.1007/978-1-4419-1005-9_454

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Keller U. Nutritional Laboratory Markers in Malnutrition. Journal of Clinical Medicine. 2019; 8(6):775. https://doi.org/10.3390/jcm8060775

Kyle U.G., Bosaeus I., De Lorenzo A.D., Deurenberg P., Elia M. et al. Bioelectrical impedance analysis—part I: review of principles and methods, Clinical Nutrition, 2004; 23(5):1226-124. https://doi.org/10.1016/j.clnu.2004.06.004.