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| FACULTY: | Faculty of Mechanical Engineering and Energetics |
| FIELD OF STUDY: | Food Technology and Human Nutrition |
| ERASMUS COORDINATOR OF THE FACULTY: | Agnieszka Szparaga, PhD, DSc, Eng |
| E-MAIL ADDRESS OF THE COORDINATOR: | Agnieszka.szparaga@tu.koszalin.pl |
| COURSE TITLE: | **Basics of Human Nutrition** |
| LECTURER’S NAME: | Zdzisław Domiszewski, PhD, DSc, Eng. |
| E-MAIL ADDRESS OF THE LECTURER: | zdzislaw.domiszewski@tu.koszalin.pl |
| ECTS POINTS FOR THE COURSE: | 3 |
| COURSE CODE (USOS): | 0811>2000-PŻCz; 0821>2000-PŻCz |
| ACADEMIC YEAR: | 2024/2025 |
| SEMESTER: (W – winter, S – summer) | W |
| HOURS IN SEMESTER: | Lecture (30h) + Group tutorials (15h) |
| LEVEL OF THE COURSE:  (1st cycle, 2nd cycle, 3rd cycle) | 1st cycle |
| TEACHING METHOD:  (lecture, laboratory, group tutorials, seminar, other-what type?) | Lecture, Group tutorials |
| LANGUAGE OF INSTRUCTION: | * **English full time scheme for classes with 5 and more International Erasmus+ students enrolled/accepted;** * **English 50% individually with the teacher + Polish 50% with Polish students or individual project work- scheme for classes with less than 5 International Erasmus+ students enrolled/ accepted;** |
| ASSESSMENT METOD:  (written exam, oral exam, class test, written reports, project work, presentation, continuous assessment, other – what type?) | Oral exam, class test |
| COURSE CONTENT: | **Lecture:**  1. Food as a source of protein in human nutrition.  2. Food as a source of carbohydrates in human nutrition.  3. Food as a source of fats in human nutrition.  4. Drinking water, mineral water, body water, dehydration.  5. Water-soluble and fat-soluble vitamins. Sources in food.  6. Macronutrients and micronutrients. Sources in food. Acid-base balance.  7. Antinutrients in food.  8. Functional foods.  9. Bioactive components in food.  10. Nutritional value of 12 food groups.  11. Alternative ways of nutrition.  12. impact of human nutrition on nutritional status.  **Exercises:**   1. Introductory classes - introducing students to the topics of the classes, conditions for passing. 2. Evaluation of nutritional value of food products by different methods. Nutritional information. Markings on food packaging. 3. Methods of assessing nutrient intake. 4. Determination of energy requirements of the body. 5. Evaluation of daily protein intake, including amino acids. 6. Evaluate the nutritional value of proteins in the student's diet. 7. Analysis of water and mineral intake in students' diets. Acid-base and water-electrolyte balance. 8. Analysis of intake of water-soluble vitamins in students' diets. 9. Analysis of intake of fat-soluble vitamins in students' diets. 10. Evaluation of the nutritional value of alternative diets 11. Principles of rational nutrition. Arranging menus for a selected social group with consideration of bioactive components. 12. Comparison of nutritional value of own menus to current nutrition standards. 13. Evaluation of the value of 12 food groups 14. Course credit |
| ADDITIONAL INFORMATION: | Reference list (selected):   1. Gawęcki J., Żywienie człowieka. Basics of the science of nutrition, Wyd. PWN, W-wa, 2010 2. Włodarek D., Lange E., Kozłowska L., Głąbska D., Dietoterapia, PZWL, Warszawa, 2014. 3. Jarosz M., Rychlik E., Stoś K., Charzewska J., Norms of nutrition for the Polish population and their application, Wyd. NIZP-PZH, W-wa, 2020 4. Kunachowicz H., Przygoda B., Nadolna I., Iwanow K., Tables of composition and nutritional value of food, PZWL, Warsaw, 2017, 5. Journal, Polish Journal of Food and Nutrition Sciences, <http://journal.pan.olsztyn.pl/> 6. journal, Annals of the National Institute of Hygiene, Warsaw, http://wydawnictwa.pzh.gov.pl/roczniki\_pzh/ |

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