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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 (Food Technology and Human Nutrition) |
| COURSE TITLE: | **Analysis and evaluation of food quality** |
| LECTURER’S NAME: | Zdzisław Domiszewski, PhD, DSc, Eng. |
| E-MAIL ADDRESS OF THE LECTURER: | zdzislaw.domiszewski@tu.koszalin.pl |
| ECTS POINTS FOR THE COURSE: | 4 |
| COURSE CODE (USOS): | 0811>2000-AiOJŻ (Lec+ex); 0811>2000-AiOJŻ-lab |
| ACADEMIC YEAR: | 2024/2025 |
| SEMESTER: (W – winter, S – summer) | S |
| HOURS IN SEMESTER: | Lec (30h) + Ex (15h) + Lab (30h) |
| LEVEL OF THE COURSE:  (1st cycle, 2nd cycle, 3rd cycle) | 1st cycle |
| TEACHING METHOD:  (lecture, laboratory, group tutorials, seminar, other-what type?) | Lecture, laboratory, 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 METHOD:  (written exam, oral exam, class test, written reports, project work, presentation, continuous assessment, other – what type?) | (Lec) Written test,  (Ex) Presentation,  (Lab) Written reports and class test |
| COURSE CONTENT: | **Lecture**   1. Analytics interdisciplinary knowledge - the ability to analyze and evaluate the quality of food 2. Sensory analysis and evaluation of taste and smell sensitivity tests 3. Titration methods in analytics 4. Measurement units-units conversion 5. Instrumental analysis of food, analytical procedure 6. Methods for determining the content of proteins in food products 7. Methods for determining the content of sugars in food products 8. Methods for determining the fat content in food products 9. Methods for determining moisture and dry matter in food products   **Exercises**   1. Selection of the analyzed group of food products 2. Product characteristics 3. Evaluation of the packaging 4. Evaluation of food ingredients 5. Sampling 6. Sensory analysis and organoleptic evaluation 7. Methods for the determination of ingredients in a selected product 8. Evaluation of food quality   **Laboratory**   1. Health and safety regulations for laboratory laboratories. Apparatus and glass. 2. Qualitative, weight and volume analysis. Sampling and preparation of solutions. Application of selected sensory methods 3. Methods for the determination of proteins in food products. 4. Methods for the determination of sugars in food products. 5. Methods for the determination of preservatives in food products. 6. Methods for determining fat content in food products. 7. Methods for determining moisture and dry matter in food products. 8. Basics of sensory analysis. |
| ADDITIONAL INFORMATION: | Reference list (selected):   1. Kocjan R. 2015, Analytical chemistry part I and II. Handbook for students. Ed. PZWL; 2. Nogali-Kołucka M.: Analysis of food, selected methods of qualitative and quantitative determinations of food ingredients, 2010; 3. Tajner-Czopek A., Kita A.: Analiza żywności-jakość produktów spożywczych, 2005; 4. Bączkowicz M., Fortuna T., Juszczak L., Sobolewska-Zielińska J. 2012, Fundamentals of analysis and evaluation of food quality. Script for exercises edited by T. Fortuny, Wyd. UR in Krakow., |

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