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| FACULTY: | Faculty of Mechanical and Energy Engineering |
| 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: | Biotechnology of food additives |
| LECTURER’S NAME: | Agnieszka Szparaga, PhD, DSc, Eng |
| E-MAIL ADDRESS OF THE LECTURER: | Agnieszka.szparaga@tu.koszalin.pl |
| ECTS POINTS FOR THE COURSE: | 1 |
| COURSE CODE (USOS): | 0821>2000/1-BDdŻ |
| ACADEMIC YEAR: | 2025/2026 |
| SEMESTER:  (W – winter, S – summer) | W |
| HOURS IN SEMESTER: | 15h lectures |
| LEVEL OF THE COURSE:  (1st cycle, 2nd cycle, 3rd cycle) | 1st |
| TEACHING METHOD:  (lecture, laboratory, group tutorials, seminar, other-what type?) | Lectures |
| 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?) | written reports, written test |
| COURSE CONTENT: | 1. Biotechnological processes occurring in the production of food ingredients (among others. Proteins, starter cultures, enzyme preparations, aromatic compounds, organic acids, alcohols) 2. The importance of fermentation technologies, natural preservatives, enzymatic modification of food ingredients, sucrose, cellulose, pectin 3. Food additives used as probiotics and natural preservatives produced during fermentation processes of microorganisms 4. Amino acids as food additives, opportunities for protein biosynthesis as a food and feed additive (use and properties of microorganisms, benefits of using microorganisms for protein synthesis), and essential fatty acids (opportunities for microbial fat synthesis). |
| ADDITIONAL INFORMATION: |  |

/sporządził, data/