<table>
<tr><td>Course code</td><td></td></tr>
<tr><td>Type and description</td><td>Background Course</td></tr>
<tr><td>ECTS credit</td><td>2</td></tr>
<tr><td>Course name</td><td>Advances in Fermented Food and Beverages</td></tr>
<tr><td>Course name in Polish</td><td>Postępy w technologii żywności i napojów fermentowanych</td></tr>
<tr><td>Language of instruction</td><td>English</td></tr>
<tr><td>Course level</td><td>8 PRK</td></tr>
<tr><td>Course coordinator</td><td>Dr hab. inż. Edyta Kordialik-Bogacka, prof. uczelni (0000-0002-4166-6074)</td></tr>
<tr><td>Course instructors</td><td>Dr hab. inż. Edyta Kordialik-Bogacka, prof. uczelni (0000-0002-4166-6074), Dr hab. inż. Anna Diowksz, prof. uczelni (0000-0001-8673-8847); Dr hab. inż. Katarzyna Śliżewska, prof. uczelni (0000-0002-3161-1707)</td></tr>
<tr><td>Delivery methods and course duration</td><td>
<table>
<tr><th></th><th>Lecture</th><th>Tutorials</th><th>Laboratory</th><th>Project</th><th>Seminar</th><th>Other</th><th>Total of teaching hours during semester</th></tr>
<tr><td>Contact hours</td><td>5</td><td></td><td>10</td><td></td><td></td><td>0</td><td>15</td></tr>
<tr><td>E-learning</td><td>No</td><td>No</td><td>No</td><td>No</td><td>No</td><td>No</td><td></td></tr>
<tr><td>Assessment criteria (weightage)</td><td>1,00</td><td></td><td>1,00</td><td></td><td></td><td>0,00</td><td></td></tr>
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<tr><td>Course objective</td><td>The aim of the course is to familiarize PhD students with modern applications in fermentation technology, including baking, dairy and alcoholic beverages technologies</td></tr>
<tr><td>Learning outcomes</td><td>After completing the course student is able to:
1. List and describe innovative fermented products – outcomes W1, K1
2. List novel raw materials and additives and explain their technological role – outcomes W1, K1
3. Describe potential modifications in technologies of fermented products – outcomes W1, K1
4. Select and apply the appropriate analytical techniques - outcomes U3, K1
5. Interpret and evaluate the results of analysis critically - outcomes W4, K1, K2
6. Organize work in a group, cooperate with members of the group, show responsibility for the entrusted range of studies, quality of own work - outcomes U3</td></tr>
<tr><td>Assessment methods</td><td>Learning outcomes 1-3: written test.
Learning outcomes 4-6: laboratory reports, assessment of work, attitude and engagement in the classes.
Final assessment includes:
1. written test (80%)
2. laboratory reports and student activity (20%)</td></tr>
<tr><td>Prerequisites</td><td>Knowledge of biochemistry, microbiology and biotechnology</td></tr>
<tr><td>Course content with delivery methods</td><td>LECTURE
Presentation of innovations in fermented food and beverages production (bread, meat and milk products, beer, wine and spirits), including use of starters, probiotics, immobilized microorganisms, alternative raw materials, enzymes, biologically active substances and other additives.
LABORATORY
The programme covers microbiological problems, fermentation technologies, including starters, fermentation with immobilized cells.</td></tr>
<tr><td>Basic reference materials</td><td>Sandeep Kumar Panda; Prathapkumar Halady Shetty (Eds). Innovations in Technologies for Fermented Food and Beverage Industries, Springer, 1st edition, 2018</td></tr>
<tr><td>Other reference materials</td><td>-</td></tr>
<tr><td>Average student workload outside classroom</td><td>35 h</td></tr>
<tr><td>Comments</td><td>-</td></tr>
<tr><td>Last update</td><td>25.01.2022</td></tr>
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