

<b>1. Field of study</b>	<b>Biophysics</b>
2. Faculty	Faculty of Science and Technology
3. Academic year of entry	2022/2023 (winter term), 2023/2024 (winter term), 2024/2025 (winter term), 2025/2026 (winter term)
4. Level of qualifications/degree	second-cycle studies
5. Degree profile	general academic
6. Mode of study	full-time

**Module:** Specialized Laboratory

**Module code:** W4-2BF-MB-21-25

**1. Number of the ECTS credits:** 2

<b>2. Learning outcomes of the module</b>			
<b>code</b>	<b>description</b>	<b>learning outcomes of the programme</b>	<b>level of competence (scale 1-5)</b>
MB_25_1	Student got acquainted with work in biological and biochemical laboratories	KBF_K04 KBF_U01 KBF_W01 KBF_W02 KBF_W04 KBF_W10	4 4 4 4 4 4
MB_25_2	Student became acquainted with the most modern scientific equipment for physical research on biological systems	KBF_K02 KBF_U01 KBF_W01 KBF_W02 KBF_W04 KBF_W10 KBF_W11	4 4 4 4 4 4 4
MB_25_3	Student can present the results in the form of projects and scientific publications	KBF_K09 KBF_U09 KBF_U12 KBF_U14	4 4 4 4
MB_25_4	Student learned the English terminology used in biophysics	KBF_K01	5

		KBF_U13	5
MB_25_5	Student learned to work in a team	KBF_K03	4
		KBF_U10	4
		KBF_U11	4

3. Module description	
<b>Description</b>	<p>During the course, students will have the opportunity to familiarize themselves with modern scientific equipment and the possibilities of testing drugs and biological materials as well as the visual system. Students can choose to work in the following research laboratories:</p> <ol style="list-style-type: none"> <li>1. biophysical and biochemical laboratories - cell culture and research,</li> <li>2. laboratory of optics and optical spectroscopy methods,</li> <li>3. ESCA, ToF-SIMS laboratory,</li> <li>4. spectacle optics laboratory,</li> <li>5. X-ray spectroscopy laboratory.</li> </ol>
<b>Prerequisites</b>	

4. Assessment of the learning outcomes of the module			
code	type	description	learning outcomes of the module
MB_25_w_1	credit	Before starting the exercise, the student takes an introductory test, showing his preparation for work. Student prepares a report on the exercises	MB_25_1, MB_25_2, MB_25_3, MB_25_4, MB_25_5

5. Forms of teaching						
code	form of teaching			required hours of student's own work		assessment of the learning outcomes of the module
	type	description (including teaching methods)	number of hours	description	number of hours	
MB_25_fs_1	laboratory classes	Credit for individual laboratories on the basis of the presented final report	30	Development of measurement results, preparing a report	45	MB_25_w_1