

1.	Field of study	Biology
2.	Faculty	Faculty of Natural Sciences
3.	Academic year of entry	2023/2024 (winter term), 2024/2025 (winter term)
4.	Level of qualifications/degree	first-cycle studies
5.	Degree profile	general academic
6.	Mode of study	full-time

Code of the learning outcome of the programme	Learning outcomes The graduate:	Codes of the second-order PRK characteristics to which the learning outcome of the programme is related
KNOWLEDGE		
1BL_W01	has an advanced understanding of the relationships and interrelationships between chemical, physical and biological processes in nature	2018_P6S_WG
1BL_W02	demonstrates an advanced level of knowledge and understanding of the biological terminology relevant to the field of study and related disciplines	2018_P6S_WG
1BL_W03	has advanced knowledge of the differences between prokaryotic and eukaryotic cell structures, of the most important functional relationships both between cellular constituents and between cells, as well as knowledge of the organisation of tissues, organs and the functional relationships between them	2018_P6S_WG
1BL_W04	has advanced knowledge and understanding of the functioning of the organism (plant and animal) as a whole and of the relationship between organism and environment	2018_P6S_WG
1BL_W05	knows the mechanisms of genetic information flow, regulation of gene expression, inheritance and genetic engineering and biotechnology to ensure an advanced understanding of these issues	2018_P6S_WG
1BL_W06	has advanced knowledge of phylogenetic issues and evolutionary processes and directions	2018_P6S_WG
1BL_W07	has advanced knowledge of the classification of organisms, biodiversity understands the natural phenomena and processes that shape it and the impact of humans on the environment at local, regional and global scales	2018_P6S_WG, 2018_P6S_WK
1BL_W08	knows the types of experimental and field methods and lists modern laboratory, measuring and imaging techniques representing advanced knowledge in this field	2018_P6S_WG
1BL_W09	has advanced knowledge and understanding of the mathematical and statistical methods and computer tools required to interpret natural phenomena and biological processes and to analyse experimental and field data	2018_P6S_WG
1BL_W10	knows the principles concerning the creation and development of forms of individual entrepreneurship and understands the principles of research funding	2018_P6S_WK
1BL_W11	recognises and presents the principles of industrial property and copyright protection and can use patent information	2018_P6S_WK
1BL_W12	knows the principles of occupational health and safety and ergonomics	2018_P6S_WK
1BL_W13	knows and understands the organisational, ethical, economic and legal conditions related to scientific, teaching and implementation activities as well as the performance of professional activities related to the programme of study	2018_P6S_WK
1BL_W14	has an advanced knowledge of English vocabulary and grammar at the B2 level, including specialised scientific terminology in biology and related fields	2018_P6S_WG
1BL_W15	has advanced knowledge and understanding of the interrelationship of selected topics in the humanities, social sciences and biological sciences	2018_P6S_WG, 2018_P6S_WK
MOB.2023_W01	has advanced knowledge of selected scientific or scholarly theories and methods, is familiar with the issues specific to the chosen academic discipline and understands its connection with the leading discipline of the degree programme	2018_P6S_WG

MOB.2023_W02_P	understands the relationship between entrepreneurship-related issues and the leading discipline of the degree programme, exhibits an entrepreneurial mindset	2018_P6S_KO, 2018_P6S_WK
MOB.2023_W03_VP	understands the relationship between legal issues – especially those pertaining to civil rights and obligations and their implementation – and the leading discipline of the degree programme, in particular the basic concepts and provisions pertaining to the protection of industrial protection and copyright law	2018_P6S_WK
OMU.2023_W01	has advanced knowledge of selected scientific theories and methods and is familiar with the issues specific to the selected academic discipline in the context of other disciplines	2018_P6S_WG
SKILLS		
1BL_U01	can apply selected techniques and research tools of experimental and environmental biology	2018_P6S_UW
1BL_U02	applies advanced mathematical and statistical methods to analyse data and describe results, and can use computer software packages to the extent that they can be applied in the discipline studied and in everyday life	2018_P6S_UW
1BL_U03	can select and use available sources of information, evaluate, critically analyse and synthesise this information	2018_P6S_UK, 2018_P6S_UW
1BL_U04	can communicate using specific terminology appropriate to biological sciences and related fields	2018_P6S_UK
1BL_U05	can use its knowledge to obtain and prepare the biological material used in research	2018_P6S_UW
1BL_U06	can design and carry out experiments typical of biology under supervision, using the methods learnt	2018_P6S_UO, 2018_P6S_UW
1BL_U07	can work out a selected biological problem, under the supervision of the mentor, based on literature data and own research results	2018_P6S_UO, 2018_P6S_UW
1BL_U08	can analyse the results obtained and discuss them based on the available literature	2018_P6S_UK, 2018_P6S_UW
1BL_U09	presents the results of their independent work in the form of reports, papers and essays, and can prepare documentation of the exercises carried out independently	2018_P6S_UK, 2018_P6S_UW
1BL_U10	when participating in a debate, seminar or discussion, one can present and evaluate different opinions and positions and discuss them	2018_P6S_UK
1BL_U11	can work independently and communicate with the group during teamwork	2018_P6S_UK, 2018_P6S_UO
1BL_U12	can plan and carry out appropriate physical, biological and chemical measurements in the field or laboratory and make appropriate observations	2018_P6S_UO, 2018_P6S_UW
1BL_U13	can determine the level of their knowledge and skills to plan and carry out self-learning in a rational manner	2018_P6S_UU
1BL_U14	can use a foreign language appropriately in line with the requirements set out for level B2 of the Common European Framework of Reference for Languages and can use a basic specialist vocabulary to enable the use of foreign language biological texts	2018_P6S_UK, 2018_P6S_UW
1BL_U15	can search for the necessary information in sources of various types in the humanities, social sciences and biological sciences and select and summarise it critically, forming a coherent picture of an interdisciplinary issue.	2018_P6S_UO, 2018_P6S_UU, 2018_P6S_UW
KJ.2023_U	clearly and comprehensibly communicates with others in a foreign language at the B2 level of the Common European Framework of Reference for Languages, making use of his/her knowledge and terminology	2018_P6S_UK
MOB.2023_U01	asks questions, analyzes research problems and finds solutions to them based on the knowledge, skills and experience he/she has gained within the chosen academic discipline in conjunction with the leading discipline of the degree programme; communicates the results of his/her work in a way which is clear and understandable not only to specialists	2018_P6S_UK, 2018_P6S_UW
OMU.2023_U01	has advanced skills in asking research questions, analyzing problems or providing practical solutions to them based on the knowledge, experience and skills gained within the chosen academic discipline in the context of other disciplines	2018_P6S_UW
SOCIAL COMPETENCES		

1BL_K01	understands the importance of knowledge in problem-solving, can critically appraise existing knowledge and is ready to seek expert advice when facing difficulties in solving a problem independently	2018_P6S_KK
1BL_K02	is ready to act in an entrepreneurial and creative manner and to recognise and respond appropriately to social and environmental problems	2018_P6S_KO, 2018_P6S_KR
1BL_K03	is ready to undertake professional activity, observe professional ethics and safety at work, and improve professional and personal competences	2018_P6S_KR
1BL_K04	critically analyse information appearing in the mass media and popular science literature	2018_P6S_KO
1BL_K05	demonstrates the need to update acquired biological knowledge constantly, understands the need to communicate new developments in the field to the public and can convey this information in an understandable way	2018_P6S_KK, 2018_P6S_KO
MOB.2023_K01	is ready to meet social obligations, co-organize activities for the benefit of the community and is open to scientific solutions to cognitive and practical problems	2018_P6S_KK, 2018_P6S_KO
OMU.2023_K01	acknowledges and makes use of knowledge from different disciplines and is ready to change opinion in the light of scientifically proven arguments	2018_P6S_KK