

Learning outcomes

Knowledge

The graduate knows and understands

Code	Content	PRK
BTY_K2_W01	up-to-date research technology that provides solutions to innovative problems on the verge of technology and contemporary biology/medicine	P7S_WG
BTY_K2_W02	issues related to the use of living organisms in biotechnological solutions for medical applications	P7S_WG
BTY_K2_W03	at the advanced level - complex biological phenomena at different levels of the hierarchical organization of life and their importance to biotechnology	P7S_WG
BTY_K2_W04	mechanisms of the functioning of organisms under the physiological norm and pathological conditions	P7S_WG
BTY_K2_W05	advanced tools of statistics and bioinformatics which are indispensable in designing/performing experiments and in the interpretation of the results	P7S_WG
BTY_K2_W06	rules of designing and testing therapeutic solutions based on recent findings of natural sciences and other sciences, including biotechnology	P7S_WG
BTY_K2_W07	rules of performing scientific research and how to apply for funding for research and implementation projects	P7S_WG
BTY_K2_W08	at the advanced level - the laws and rules of ethics concerning biotechnological and biomedical research, and biomaterials as well as protection of personal data, intellectual and industrial property rights	P7S_WK
BTY_K2_W09	at the advanced level- the categories of notions in natural sciences and other sciences, and specialist terminology, specifically in the field of biotechnology	P7S_WG

Skills

The graduate can

Code	Content	PRK
BTY_K2_U01	independently select and use the tools and methods for solving research and technological problems, and act based on state-of-the-art findings of science, including medical biotechnology	P7S_UW
BTY_K2_U02	design and test biotechnological solutions for medical applications	P7S_UW
BTY_K2_U03	creatively utilize and update their knowledge of biotechnology - identify, formulate, and solve research problems, conduct critical analysis and selection of information coming from publicly available sources	P7S_UW
BTY_K2_U04	present and review different opinions and positions, and moderate a discussion on the subject of biotechnology and related disciplines as well as interdisciplinary subjects, while complying with applicable laws and norms of ethics	P7S_UK
BTY_K2_U05	use English language and specialist terminology related to natural sciences, in accordance with requirements for level B2+ of CEFR (Common European Framework of Reference for Languages)	P7S_UK
BTY_K2_U06	organize teamwork and cooperate with other individuals assuming various roles within the group	P7S_UO

Code	Content	PRK
BTY_K2_U07	design their self-education, improve professional competence, and advise other individuals on their education	P7S_UU

Social competence

The graduate is ready to

Code	Content	PRK
BTY_K2_K01	critically assess knowledge and use it in solving research and technological problems	P7S_KK
BTY_K2_K02	improve and update their knowledge of biotechnology and related areas of study	P7S_KK
BTY_K2_K03	cooperate with specialists representing related areas of study	P7S_KK
BTY_K2_K04	assess publicly available information concerning biotechnology, and participate responsibly in social discourse	P7S_KK
BTY_K2_K05	observe, disseminate, and develop the principles of bioethics and professional ethics as well as intellectual and industrial property regulations, and accept liability for the team's working safety and hygiene, specifically when handling biological material	P7S_KR
BTY_K2_K06	develop enterprise and innovation in their work as professionals, and respond to the society and economy's needs	P7S_KO