

Global change biology – master’s thesis topics - the academic year of 2024/2025

No.	Thesis promoter	Thesis topics	The nature of the thesis
1.	prof. dr hab. Katarzyna Hrynkiewicz	The use of endophytic bacteria in the promotion of perennial grain Kernza	practical/theoretical
2.	prof. dr hab. Katarzyna Hrynkiewicz	The use of endophytic fungi in the promotion of perennial cereals Kernza	practical/theoretical
3.	prof. dr hab. Katarzyna Hrynkiewicz	Endophytic bacteria of crop plants - selection and application	practical/theoretical
4.	prof. dr hab. Katarzyna Hrynkiewicz	Endophytic fungi of crop plants - selection and use	practical/theoretical
5.	prof. dr hab. Katarzyna Hrynkiewicz	Mycorrhizal fungi of forest trees - identification and use	practical/theoretical
6.	prof. dr hab. Michał Wojciechowski	Heat production and heat loss in bats	practical
7.	prof. dr hab. Michał Wojciechowski	Nest box use in Bory Tucholskie	practical
8.	dr hab. Tomasz Kakareko, prof. UMK	Effects of inorganic pollutants on the behaviour of selected aquatic organisms.	practical
9.	dr hab. Agnieszka Kalwasińska, prof. UMK	Microorganisms and climate change	theoretical
10.	dr hab. Marcin Koprowski, prof. UMK	Tree rings as a proxy data in climate reconstruction	practical
11.	dr hab. Agnieszka Piernik, prof. UMK	Industrial areas as biodiversity hot spots	practical (data collection and management, field work as supplementary)
12.	dr hab. Agnieszka Piernik, prof. UMK	The role of vegetation in urban ecosystems	practical
13.	dr hab. Agnieszka Piernik, prof. UMK	Assessment of natural capital and ecosystem services of selected Natura 2000 habitats	practical (data collection and management, field work as supplementary)
14.	dr hab. Agnieszka Piernik, prof. UMK	Plant functional traits adaptations to the salinity stress	practical
15.	dr hab. Agnieszka Piernik, prof. UMK	Plant functional traits as vegetation adaptation strategies	practical
16.	dr hab. Małgorzata Poznańska-Kakareko, prof. UMK	Impact of global warming on the survival and migration of invasive and native Unionidae bivalves	Practical work
17.	dr hab. Małgorzata Poznańska-Kakareko, prof. UMK	Comparison of shell decomposition rates of the invasive mussels <i>Corbicula leana</i> , <i>Dreissena polymorpha</i> and the native Unionidae bivalves	Practical work
18.	dr hab. Marcin Woch, prof. UMK	<i>Diversity of vascular plant communities in a selected natural area (e.g. village, town, commune, post-industrial wasteland, Prussian forts, ruins, cemeteries, ruins, heaps, pits and other wastelands.)</i>	practical
19.	dr hab. Marcin Woch, prof. UMK	<i>The share of poisonous, medicinal and hallucinogenic plants in the flora of a selected area.</i>	practical

20.	dr hab. Marcin Woch, prof. UMK	<i>Vegetation succession on disused railway tracks .</i>	practical
21.	dr Magdalena Czarnecka (pula dr hab. T.Kakareko, prof.UMK)	Predator-prey interactions under light pollution in aquatic environment.	practical
22.	dr Magdalena Czarnecka (pula dr hab J. Żbikowski, prof. UMK)	Mitigating the ecological impact of light pollution on aquatic invertebrates: dimming the light or changing its colour?	practical
23.	dr Agnieszka Ludwiczak (pula dr hab. M. Woch, prof. UMK)	<i>Biological methods of neutralizing toxins.</i>	practical
24.	dr Agnieszka Pawetek (pula prof. dr hab. A. Szmidt-Jaworska)	Physiology and molecular mechanism of action of electromagnetic field treatment in <i>Arabidopsis thaliana</i>	practical
25.	dr Agnieszka Pawetek (pula prof. dr hab. A. Szmidt-Jaworska)	Effects of pre-sowing electromagnetic field treatment on germination, growth and yield of triticale ( <i>× Triticosecale</i> )	practical
26.	dr Anna Wojciechowska (pula dr hab. M. Woch, prof. UMK)	<i>Succession of ruderal communities under anthropopressure.</i>	theoretical or practical