

<b>Title:</b>	<b>Ecological modelling of lakes and wetlands</b>
<b>Lecture hours:</b>	15 lecture 15 laboratory
<b>Study period: (summer/winter)</b>	winter
<b>Number of credits:</b>	2 ECTS
<b>Assessment methods:</b>	Tests
<b>Language of instruction:</b>	English
<b>Prerequisites:</b>	-
<b>Course content:</b>	-Modeling the response of the biological components and environmental conditions of lakes and wetlands -Modeling management options for controlling the invasive Zebra Mussel, -Zebra Mussel mortality rates and system carrying capacity, -Population dynamics and model calibration, -Statistical analysis and modelling methods.
<b>Learning outcomes:</b>	Students know: -how to model the reactions of the benthic microbial community, -the ability to manage models for invasive control of Zebra mussels, -Statistical analysis and different model calibration,
<b>Name of lecturer:</b>	Professor Krystian Obolewski, MSc Martyna Bąkowska
<b>Contact (email address):</b>	Martyna Bąkowska: bakowska.martyna@ukw.edu.pl
<b>Literature:</b>	N.B. Chang, S. E. Jorgensen, F. L. Xu, Ecological Modelling and Engineering of Lakes and Wetlands [w:] Developments in Environmental Modeling Volume 26. Grillo O., Venora G., 2011, Ecosystems Biodiversity, Intech. Wolanski E., Elliott M., 2016, Estuarine Ecohydrology, Second edition. Wood P. J., Hannah D. M., Sadler J. P., Hydroecology and Ecohydrology Past, Present and Future, Wiley. Keddy P. A., Wetlands Ecology Principles and Conservation, second edition, Cambridge University Press

