Title:	**Ecosystems services**
Lecture hours:	30 hrs
Study period: (summer/winter)	Summer
Number of credits:	3
Assessment methods:	15 hrs - lectures, 15 hrs - lab
Language of instruction:	English
Prerequisites:	High-school level knowledge of ecology
Course content:	1. Ecosystem services – definition, history, concepts. Abiotic and biotic elements of the standard international classification of ecosystem services 2. Provisioning services 3. Regulating services 4. Habitat (supporting) services. The importance of biodiversity for ecosystem services 5. Cultural services – elements of landscape shaping, including urban areas 6. Mapping ecosystem services 7. Assessment of ecosystem services 8. Common international classification of ecosystem services. 9. Valuation of ecosystem services and their application in economic calculation – practical examples in the management of natural resources
Learning outcomes:	• Gains knowledge that allows for linking planning in the management of natural resources with the functioning of the ecosystem within the framework of ecosystem services • Possesses knowledge in the field of research techniques and tools related to mapping and assessment of ecosystem services, enabling planning and conducting research related to renewable energy sources • Can use the knowledge they possess – to formulate and solve problems, as well as perform tasks typical of professional activity related to renewable energy • Can adapt techniques and tools of ecosystem services to solve research problems in natural resources management. Analyses the effects of anthropogenic pressure and can propose actions in natural compensation. • Independently plans and implements its learning in renewable energy sources. • Acts ethically and responsibly and notices and solves dilemmas related to the work performed. • Thanks to the acquired knowledge and skills in ecosystem services and environmental economics, he/she can think and act in an entrepreneurial manner, acting responsibly and understanding the dilemmas related to managing natural resources.
Name of lecturer	prof. Krystian Obolewski, MSc Mikołaj Matela
Contact (email address):	krystian.obolewski@ukw.edu.pl
Literature:	Articles in Elsevier's journal "Ecosystem services" Jetske A. Bouma (Editor), Pieter J. H. van BeukeringEcosystem Services: From Concept to Practice Illustrated Edition 2015 Atlas of Ecosystem Services Drivers, Risks, and Societal Responses, Springer 2019