ECOLOGY ECO

OVERVIEW OF OUR CURRICULUM-COMPLIANT EXPERIMENTS

Sensors		
	LB3.0	**INTRODUCTION TO METHODS**
	LB3.0.0	Microscopy
	LB3.0.0.1	Structure and functionality of an optical microscope
	LB3.0.0.2	Making micro-preparations
	LB3.1	**ECOSYSTEMS**
	LB3.1.1	Abiotic factors
	LB3.1.1.1	Temperature-dependence of life processes
●	LB3.1.1.2C	Bergmann's rule (factor temperature) (with Mobile-CASSY 2 WiFi) DIGITAL
●	LB3.1.1.3C	Allen's rule (factor temperature) (with Mobile-CASSY 2 WiFi) DIGITAL
●	LB3.1.1.4C	Grouping as protection from cold (with Mobile-CASSY 2 WiFi) DIGITAL
	LB3.1.1.5	Insulating effect of body protection
	LB3.1.1.5C	Insulating effect of body protection (with Mobile-CASSY 2 WiFi) DIGITAL
	LB3.1.1.6	Comparison of leaf cross-sections: Sun leaf and shade leaf
	LB3.1.2	Biotic factors
	LB3.1.2.1	Interspecific competition in plants
	LB3.1.2.3	Symbiosis
	LB3.1.3	Biodiversity
	LB3.1.3.2	Analysis of ground fauna using sieves (Berlese funnels)
	LB3.1.3.4	Observation of living organisms in an infusion of hay
	LB3.1.4	Population ecology
	LB3.1.4.3	Food chain: Decomposers
	LB3.2	**ANALYSIS OF ECOSYSTEMS**
	LB3.2.1	Analysis of waterbodies on site
●●	LB3.2.1.2C	pH value of waterbodies (with Mobile-CASSY 2 WiFi) DIGITAL
●●	LB3.2.1.3C	Salt content of waterbodies (with Mobile-CASSY 2 WiFi) DIGITAL
	LB3.2.1.4	Chemical water parameters
●●●●	LB3.2.1.5C	Water protocol (with Mobile-CASSY 2 WiFi) DIGITAL
	LB3.2.1.6C	Temperature measurement in waterbodies (with Mobile-CASSY 2 WiFi) DIGITAL
	LB3.2.2	Forest and soil analysis
	LB3.2.2.1	Sedimentation of soil particles
	LB3.2.2.2	Soil and water
●●	LB3.2.2.3C	pH value of soil samples (with Mobile-CASSY 2 WiFi) DIGITAL
●●	LB3.2.2.4C	Humus formation and humus types (with Mobile-CASSY 2 WiFi) DIGITAL
●●	LB3.2.2.5C	Salt content of the soil (with Mobile-CASSY 2 WiFi) DIGITAL
●	LB3.2.2.6C	Abiotic factor: light intensity (with Mobile-CASSY 2 WiFi) DIGITAL
	LB3.2.2.7C	Temperature depending on location (with Mobile-CASSY 2 WiFi) DIGITAL
	LB3.2.2.8C	Diurnal variation measurements (with Mobile-CASSY 2 WiFi) DIGITAL
	LB3.3	**HUMANS AND THE ENVIRONMENT**
	LB3.3.1	Water pollution
	LB3.3.1.1	Foam - a substantial burden on the environment
	LB3.3.1.2	Eutrophication of waterbodies by phosphates
	LB3.3.1.4	Efficacy of gravel filters and activated charcoal filters
	LB3.3.2	Soil pollution
	LB3.3.2.1	Toxicity measurement of petrol with cress seeds
	LB3.3.2.2	Soil contamination with non-biological substances
	LB3.3.3	Air pollution
	LB3.3.3.1	Determination of emissions using the example of engine exhaust emissions
	LB3.4	**EVOLUTION**
	LB3.4.1	Adaptation to the environment
	LB3.4.1.1	Wing feathers of birds
	LB3.4.1.2	Examination of fish scales

For experiments marked with „C", the measurements are carried out **digitally** with the Mobile-CASSY 2 WiFi.

● Conductivity sensor
● Conductivity adapter S
● pH sensor, BNC
● pH adapter S
● NiCr-Ni adapter S, type K
● Lux sensor M

35 EXPERIMENTS