

1.	Course name: Basic Modeling in Ecology with R
2.	Course code conforms to USOS: 25-BI-S2-E+-BMER
3.	University department: Faculty of Biological Sciences, Institute of Environmental Biology, Laboratory of Forest Biology
4.	Course type: practice (30h)
5.	Degree: master
6.	Semester: winter
7.	Number of hours: 30
8.	Name, Surname, academic title: Grzegorz Neubauer, PhD (grzegorz.neubauer@uwr.edu.pl)
9.	Course description/Content: Ecological data types. Introduction to R and model fitting in R. Basic graphics in R. Random variables. Linear Models. Distributions of the response variable and Generalized Linear Models. Additive Linear Models. Random Effects and Mixed Effects Models. Hierarchical models: use and applications. State and rate parameters. Data simulation and model validation.
10.	Recommended literature: Zuur et al. 2007. Analysing Ecological Data. Springer: New York. Zuur et al. 2009. Mixed Effects Models and Extensions in R. Springer: New York.
11.	Form of credit: written test
12.	Language: English
13.	Number of ECTS: 4