

#### Adam Mickiewicz University in Poznań

Doctoral School of Languages and Literatures



# Introduction to Regression Analysis for Linguists

Dr Marta Kajzer-Wietrzny

Type of classes	seminar
Language of instruction	English
The number of hours + form of passing classes	15 hours / credit of a grade
Purposes of classes	<ul> <li>The course is designed to equip PhD candidates with the skills to:</li> <li>Design both simple and multiple regression models.</li> <li>Assess and validate the performance of regression models.</li> <li>Identify and choose the most relevant explanatory variables.</li> <li>Apply R for analysing authentic datasets.</li> <li>Interpret and explain the results in the context of linguistic research.</li> <li>Prepare their data for open access.</li> </ul>
Learning contents	<ul> <li>linear models,</li> <li>selected generalized linear models,</li> <li>interactions,</li> <li>contrast coding,</li> <li>model comparison,</li> <li>model validation,</li> <li>mixed-effects models,</li> <li>reporting regression models in academic papers.</li> </ul>
Entry requirements	English language proficiency at B-2 level
Learning outcomes	
	Verification methods:
In terms of knowledge: A person who has completed classes knows and understands:	

the achievements of world science in the discipline in which the education takes place, as well as the paradigms and directions of development of this discipline, in a way that enables their creative and innovative development and their verification within the framework of research projects undertaken [E W01];

Final test and mandatory coursework assignments throughout the duration of the course.

at an advanced level research methodology appropriate for the discipline of science in which education takes place, which allows for proper selection of research theories and tools and their effective application and modification within the framework of own research [E\_W02];

### In terms of skills: A person who has completed classes is able to:

use knowledge from various disciplines of science to creatively identify, formulate and innovatively solve complex research problems or perform advanced research tasks. In particular, he/she is able to: define the objectives and the subject of scientific research, formulate research hypotheses, develop research methods, techniques and tools and apply them creatively and effectively, draw conclusions on the basis of scientific evidence [E\_U01];

## In terms of social competences: A person who has completed classes is prepared to:

continuous improvement of professional competence and personal development, in particular by tracking and analyzing the latest developments in the represented scientific discipline [E\_K05]

#### Literature

- Levshina, N. (2015). How to do linguistics with R: Data exploration and statistical analysis. John Benjamins Publishing Company.
- Sonderegger, M. (2023). Regression modelling for linguistic data.
   MIT Press.
- Winter, B. (2019). Statistics for linguists: An introduction using R. Routledge.