

Assignment 1 – Deadline: 03.10.2024 15:15

Work on the tasks in a R Script and upload it on ILIAS.

1. Get the data:

- a. Download the [election results from the Landtagswahl in Sachsen](#).
- b. Specifically, „Landtagswahl 2024 - endgültiges amtliches Ergebnis, Datei ist nicht barrierefrei (*.xlsx, 0,32 MB) Freistaat Sachsen, Wahlkreise, Gemeinden, Teilgemeinden, Landkreise, Kreisfreie Städte“

2. Packages: If needed, install the necessary packages and load them. For this assignment, the installing and loading the *tidyverse* is sufficient. However, you can also only install and load the specific packages (e.g., *dplyr*).

3. Data import: Import the data in the .xlsx format. You can do this manually first. However, in your submission, you need to include the code to import the data.

- a. Import only the data from the sheet “LW24_endgErgebnisse_SN&WK”
- b. Store the data in a dataframe called “election_results”

4. Data wrangling:

- a. *Select & rename:* Select the columns “WK-Nr”, “WK-Name”, and the column that gives you the “Zweitstimmen” in percent for the main parties: CDU, SPD; FDP, Greens, Linke, and AfD. Select and rename (to English) in one step. Give the variables an informative but short name.
- b. *Filter:* In this step, reduce the data frame to election districts with vote shares for the Greens higher or equal to 5 percent.

5. Your R script – Bonus:

- a. Make sure that your code is clean and in the right order: I should be able to run the code without interruption on my device (besides adjusting the file path to the excel file) all at once.
- b. Annotate your code (extensively): Why are you using specific arguments? What is the purpose of specific code? ...