Faculty of Economics and Management

Python as a tool of a modern student

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Lecture 6
5.11.2025

Plan for today

- test example (types of questions, format)

- 05_plots - finalize what was left
- 05_plots_continued - unpacking, finalizing `matplotlib.pyplot`

12.11.2025 - mid-term test

Test 12.11.2025

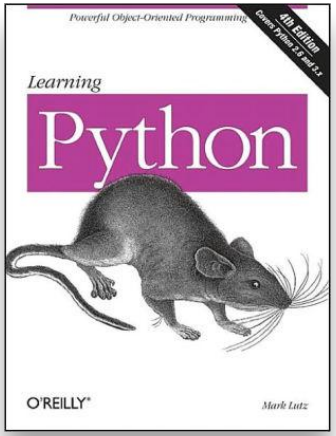
- 15 questions for 30min (or more)
- questions of 4 types:
  - `abcd`: choose the correct option
  - `order`: put items in correct order (usually lines of code)
  - `match`: for every term assign all properties that apply
  - `open`: short answer/comment is expected (few words, max 1 sentence)

- What topics will it cover?
  - **Python** - general info (what is it good for, key idea, …)
  - **variables** (`int`, `float`, `str`, `bool`…) and type conversion (str->float, float->int …)
  - numerical operations: `+, -, *, /, **, %`
  - "**containers**": `list`, `tuple`, `set`, `dict` (key property, differences, usage, "copy" issue)
  - **input/output** commands (f-strings), imports (possible ways and differences)
  - **conditions** `if-else`, `if-elif-else`: purpose, how is it written
  - **loops** `for` and while: how is it written, key differences, usage, break-continue logic
  - **functions**: how is it written, how to use, input/output
  - **OOP**: only general idea
  - **libraries** NumPy, SymPy, matplotlib: only main usage scenario (for what we use them)

Literature - for further study

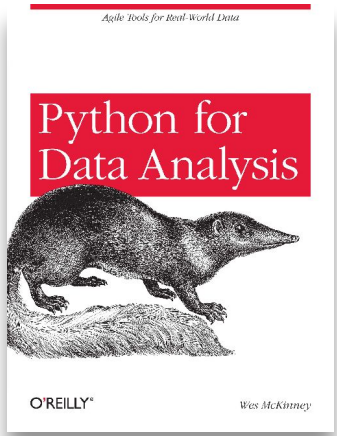
- Python from scratch in unusual way:

M. Lutz *Learning Python*



- Python for data science (~part of our course):

W. McKinney *Python for Data Analysis,* https://wesmckinney.com/book/

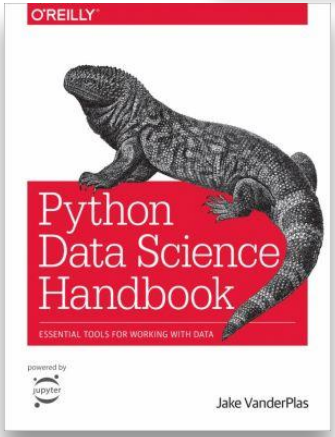


- How to handle data in Python

    + brief intro to machine learning:

J. VanderPlas *Python Data Science Handbook*

https://github.com/jakevdp/PythonDataScienceHandbook



- Documentation to packages you need (!)
- Tutorials online (?)

Not-so-recommended literature

