



Faculty of social sciences

Population and Development

Wednesday 5.11.2025

Mentors Seminar

Python for Data Analysis

Sergeev Vladislav

National Research University Higher School of Economics

2025 г.

Contacts

Sergeev Vladislav

- P&D HSE Alumni 2023-2025
 - [Final master thesis](#)
 - [Github with data and code](#)
- **PhD Student**, Faculty of Economics (Moscow State University)
- **Team Lead Machine Learning Engineer**, Sber

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- Github: <https://github.com/SergeevVladislav>





Timetable

Seminars	Location	Duration
Wednesdays 6:10–9:00 pm	Online	3 weeks
Link	https://salutejazz.ru/calls/iyo6uw?psw=O AQADgtSDx8OFAcYVEYYDAEeGg	



Repository with course material



GitHub

https://github.com/SergeevVladislav/HSE_PopDev_Mentors_Seminar_Python_Fall_2025

Course content

- Python recap
- Numpy and Pandas; Seaborn and Matplotlib
- Demogrpahy data analysis overview
- Panel Data Modeling with Statsmodels
- HSE RLMS data analysis (Oaxaca-Blinder decomposition)
- Anthropology research with Python





Grade formula

$$\text{Grade} = 0.3 * \text{Seminar Activity} + 0.7 * \text{Research}$$



Research requirements

1. Topic Selection
2. GitHub Repository
3. Open Data Sources (CSV/Excel)
4. Python Analysis
5. Jupyter Notebooks
6. Reproducibility

Fill Google Sheets -

https://docs.google.com/spreadsheets/d/1AhNAP_DO49z2MoaK75WHVVvHlu1J7CZH74jryJquxZA/edit?usp=sharing

Paper Structure

1. Max 10 pages
2. Rationale
3. Literature Review (5–10 sources)
4. Data Description & EDA: source documentation, summary statistics, visualizations, tables
5. Analysis: quantitative or qualitative Python-based research with clear hypotheses, methodology, results, and interpretations
6. Conclusions
7. References



Deadline

1. Topic Selection – **11 November 11:59 pm**

https://docs.google.com/spreadsheets/d/1AhNAP_DO49z2MoaK75WHVVvHlu1J7CZH74jryJquxZA/edit?usp=sharing

2. Paper Submit

[Submit pdf-file to va.sergeev@hse.ru](mailto:va.sergeev@hse.ru)

1. Soft Deadline - **18 November 11:59 pm (+0.25)**
2. Hard Deadline – **30 November 11:59 pm**



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Thank you for your attention!