Universidad de Navarra

Data Analytics for Social Sciences (Gr.Rel.Intern.-15) Geopolitics & Global Business

Teaching guide 2026-27

PRESENTATION

- **Degree**: International Relations, Geopolitics & Diplomacy
- **Subject**: Data Analytics for Social Sciences
- **ECTS**: 3
- **Course, semester**: 1º course, 1º semester
- **Mandatory / Elective**: Mandatory
- **Professor**: Vidit Kundu (vkundu@external.unav.es)
- **Language**: English
- **Classroom**: Thursday, 17:30-19:30, AULA 011 AMIGOS

COMPETENCES

- Recognize the value of data in social sciences and international relations.
- Identify, collect, and evaluate relevant data sources.
- Use descriptive statistics and visualizations to interpret and present data.
- Communicate insights effectively through data storytelling.
- Understand basic concepts of inference, models, and algorithms.
- Discuss the role of big data and AI, including ethical implications.
- Apply concepts to real-world case studies with a critical perspective.

PROGRAM

1. Turning the world into data and data literacy
2. Summarizing and communicating numbers, and visualization
3. Populations and measurement, and inductive inference
4. Causal inference
5. Modeling relationships using regression
6. Algorithms and prediction
7. Probability and statistics
8. Case studies.

LEARNING ACTIVITIES

Lectures (26 hours): theoretical and practical classes. Students are expected to take notes and use material made available through ADI.

Group assignment (23 hours). Students are required to apply the knowledge and tools learned during the lectures.

Personal study and teamwork: Study of the theory, solution of problem sets, group assignment, and clarifications during office hours (35 hours).

Evaluation: Tests/Exercises (2 hours), and Final Project (2 hours).

EVALUATION

Final mark will be based on:

ORDINARY CALL

- Final Project: 50%
- Final Exam: 50%

EXTRAORDINARY CALL

- Individual Project: 100%

APPOINTMENTS

Vidit Kundu

Office hours:

- By appointment via email (vkundu@external.unav.es)

BIBLIOGRAPHY

- Spiegelhalter, D. (2019). *The art of statistics*. New York: Basic Books. Find it at the Library
- Cunningham, S. (2021). *Causal inference: The mixtape*. Yale University Press.
- Pearl, J., & Mackenzie, D. (2018). *The book of why.*
- Knaflic, C. N. (2015). *Storytelling with data: A data visualization guide for business professionals*. John Wiley & Sons.
- Foreman, J. W., Jennings, G., & Miller, E. (2014). *Data smart: Using data science to transform information into insight* (Vol. 1). Indianapolis: Wiley.
- Gutman, A. J., & Goldmeier, J. (2021). *Becoming a data head: How to think, speak, and understand data science, statistics, and machine learning*. John Wiley & Sons.