

Project Guidance

Max Pellert (<https://mpellert.at>)

Social Media Data Analysis

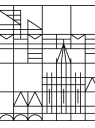


The course assessment is based as one part on a final course project.

Projects are done alone, by each participant in the course separately. The purpose of the project is to show what you have learned in the course in terms of data management, analysis, statistics, and interpretation.

Projects have to start from a research question and have an empirical focus, but at the same time critically reflect on methods, conclusions, and limitations.

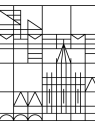
Deadlines



The timeline of the project deadlines can be found below. The deadlines are up to the end of the day in Germany marked by each date.

- **26.06.2024:** Registration of projects.
- **03.07.2024:** Project presentations session
- **21.08.2024:** Deadline for submission of final report.

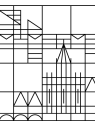
Project Steps



1. Choose a topic

While you are following the course contents and doing the assignments, keep in the back of your head that you have to choose a research topic that is interesting to you and feasible to be completed in the given time spans. It is advised to keep short notes on potential project ideas that you come up with throughout the course starting now. These notes help you to follow up on a promising idea later and to expand it into your project.

Project Steps

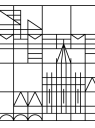


2. Project registration

At the end of June (deadline 26.06), you have to register your project as a **plain text** email to max.pellert@uni-konstanz.de. A project registration is a short text that includes the following:

1. Project title
2. Name and email address
3. Research question(s)
4. Planned data retrieval and analysis to address the questions

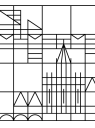
Project Steps



Invest time on designing carefully your project registration: once registered, you cannot change the research questions or project topic. You can later adapt steps in the planned data retrieval and analysis, but your final report has to argue why and justify the changes.

The registration needs to be concise but detailed enough to allow a reader to judge if you followed those steps when reading the report. Check out “ProjectRegistrationExample_SMDA.md” for an example.

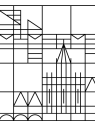
Project Steps



3. Project presentations

During project presentation sessions, students give **5-minute** presentations about their projects. This is an opportunity to get feedback, by presenting four slides:

1. Research question and motivation
2. Data and methods
3. Results
4. Conclusion and critique



4. Submit the final report

Send a final report as a PDF document (max. 6 pages, min. font size 11pt) via email (max.pellert@uni-konstanz.de).

Project reports should follow this structure:

1. Motivation: What question(s) do you seek to answer and why?
2. Data retrieval: Explain the interfaces or resources you used to collect all data necessary for the project.
3. Data processing: Explain how you filtered data, normalized values, computed additional variables, etc.
4. Analysis: Perform statistical analyses and visualizations that assess the question(s).
5. Conclusion: Evaluate answers to the question and their reliability.
6. Critique: Identify limitations and alternative explanations for your results.

Important notes about registrations



Invest time on designing carefully your project registration!

Once registered, you cannot change the research questions or project topic.

You can later adapt steps in the planned data retrieval and analysis, but your final report has to argue why and justify the changes.

Project grading

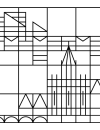


- 25% for the presentation
- 75% for the final report

Projects do not need to report “positive results”, what is important is that you show how you have addressed your research questions, document any issues or deviations, and critically reflect on methods and results.

Remember for the overall grade, that on top of the project presentation and report (60%) you can individually achieve an additional 4x10% (up to 40%) with handing in the assignment solutions.

Three project paths



A) Replicating a previous paper

Replication has to be critical and based on your own analysis, not the code of others

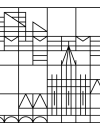
For simple papers, additional analysis beyond replication is expected

B) Building on your previous projects

C) Proposing your own idea

None of these paths has a higher expected grade, they are all equally valid.

Project topic examples



- **Bias and fairness in recommender systems**
- **Integrating Survey Data and Digital Trails Data**
- **Algorithm aversion as expressed on social media data**
- **Social media polarization**
- **Popularity assortativity of musicians in Spotify**
- **Testing Social Impact Theory in the case of COVID19**
- **Sentiment about Donald Trump and income at the regional level**

Further Information



For more details on the topic examples take a look at
“ProjectsGuide_SMDA.md” on GitHub

Please make sure to go through all of the more detailed descriptions in
“ProjectsGuide_SMDA.md”

Questions?