

Course Project Guidelines

The Course Project is intended for you to get experience analyzing research questions using data analysis tools. This is a fundamental part of your learning experience and you will encounter this sort of work both in academic and industrial environments.

In the Course Project, you will apply statistical techniques to analyze real-world datasets specific to the chosen topic.

Your specific project will be assigned to you based on your answers to the Brightspace Survey.

I strongly recommend that you be in contact with me often so as to make sure that I am aware of how the project is proceeding and that the work is going in the right direction.

The project can be completed in groups of up to 5 members. Different groups can work on the same topic, but the work and submissions need to be done independently. Although the project is done in groups, the grade will be given individually.

Deadlines

You have three deadlines.

Introduction and Methods:

Submission Deadline: Wednesday 2nd October 2024, 11:59pm

Analysis and Results:

Submission Deadline: Monday 4th November 2024, 11:59pm

Poster:

Submission Deadline: Monday 18th November 2024, 11:59pm

It is important that you meet these deadlines, because in late November/early December we will have the Data Science Week (see info on the 2023 edition [here](#)), where you can showcase your work and present it in the form of a poster, if you wish. Your grade on the project is independent of your decision to submit a poster to the Data Science Week.

Specific Tasks

The specific tasks that you have to accomplish are the following:

1. Understand the topic you are studying and perform a literature review that you will summarize in your introduction [First deadline].
2. Formulate your research questions and decide the most appropriate statistical methods to use to answer those questions [First deadline].
3. Apply data science methods to answer research questions relevant to your project [Second Deadline].
4. Summarize and interpret the results of your analysis [Second deadline].

5. Organize your work in the form of a poster [Third Deadline].

Stipulations

- Teams will be determined based on the Brightspace survey. Team members are responsible for making sure that each member contributes equally. **Each contribution must be mentioned at the bottom of your submitted document.**
- Your project is worth 30% of your final class grade. 10% will be based on *Introduction and Methods*, 10% on *Analysis and Results*, while the remaining 10% on the *Poster*.
- The length of your writing about *Introduction and Methods* and *Analysis and Results* cannot exceed 4 pages (references or pictures excluded). Your writing needs to be written in [ICLR format](#). This point of the stipulations is strict. I recommend augmenting the file from your first submission (corrections are possible) for your second submission, so you have a coherent document comprehensive of your analysis.
- The poster needs to include a title, the name of the group members, and the material that you developed in your first two submissions.

Project Evaluation Criteria

The final evaluation of the project will be based on the following criteria:

- Completeness of the introduction and the description of the methods.
- Correctness of the statistical analysis and its interpretation.
- Clarity and organization of the writing.
- Structure of the poster.

Examples

Examples of posters or of the 4-page writing about *Introduction and Methods* and *Analysis and Results* can be found respectively [here](#) and [here](#).