

Final Project Guidelines

STAT - S426/S626 Fall 2023

Due Dates:

- Monday November 13th, 2023: Proposal Due.
- Last class: Final report Due.

Description:

The final project will involve a Bayesian data analysis on a topic of your choosing. Projects can be individual or in groups of up to five students.

Project Proposal:

Groups should hand in one project proposal (with all group members' names on it) by the proposal due date. The proposal should comprise one or two pages addressing the following questions:

- What is the topic of the project?
- What are the main issues or problems to be addressed?
- What data will be used, including the variables measured?
- What are your initial thoughts on appropriate models/distributions?
- What questions and/or concerns do you have about the project?

The proposal will count towards 10 points in the 4th homework assignment.

Final Report:

The Final Report should result in a thorough but concise technical report that includes at least the following sections:

1. An Executive Summary (goals and major findings)
2. A Description of Data
3. Appropriate Bayesian statistical analyses of the data (use graphics as well as numerical summaries),
4. A Statement of the Subject Matter Implications of Your Study, and
5. A Discussion of Further Questions Raised by Your Study (that might be investigated in a subsequent experiment).

Your report will be graded by the instructor, who will be looking for the following characteristics:

- Consistency: Did you answer your question of interest?
- Clarity: Is it easy for your reader to understand what you did and the arguments you made?
- Relevancy: Did you use Bayesian statistical techniques wisely to address your question?
- Interest: Did you tackle a challenging, interesting question (good), or did you just collect descriptive statistics (bad)?