

# ST540 – Spring 2024 – Final Project

**Description:** The final exam will be a team project on a topic selected by the team. The topic can either be a Bayesian analysis of an important and challenging data set or methodological work on a topic in Bayesian statistics. The projects are to be done in groups of 3-4 students chosen by the instructor with student input. They are to result in a thorough but concise, professional quality technical presentation.

**Abstract due April 12:** These one-page proposals should list your team members and spell out briefly the main goals of the study, your basic approach, and the role of each team member. You can turn this in via email to the instructor. **IMPORTANT:** Pick a topic that interests you, but not something that you have already done! This project need not be computationally expensive nor require a huge time investment in data collection, but it does need to show careful planning and that you have mastered the concepts discussed in the course. If you are having trouble identifying a topic, please see the instructor as soon as possible.

**Final presentation due May 1:** The final product is a presentation. You should email the instructor a PDF document by 10AM on **May 1**. The PDF should have the following format:

- 1-2 introductory slides written by the group
- 1-3 slides for each group member presenting their contribution to the project (be sure the contribution of each member is clearly labelled on the slides)
- 1-2 slides summarizing the main results written by the group

The research work on the pdf document will be the primary basis of the grade. In-class students will present their work to the class live during the final exam period; on-line students will record a presentation and send the instructor a link. The presentations should be no more than one minute for the introduction, two minutes for individual contributions and one minute for conclusions (so 8 or 10 minutes total for groups of 3 or 4 students).

The presentation should include:

- Motivation for studying this problem
- A description of data and/or methods to be used
- Discussion of the major findings
- A statement of the implications of your study
- A discussion of further questions raised by your study

**Scoring:** Scores for these projects will be assigned following:

1. Novelty of the topic and methodology, 20%
2. Quality of the analysis and/or methodology, 60%
3. Professional appearance and clarity of the presentation, 20%

Scores will be given to individual students and exceeding the slide limits will be penalized.