

## **STOR 565: Machine Learning**

### **Final Group Project (20% of Course Grade)**

#### **Grading Guideline:**

1. **Proposal:** 2 points. 1 point for turning in on time; and 1 point for a complete proposal with the required components.
2. **Presentation:** 9 points. Each presentation should introduce the problem of interest and the dataset used to answer the questions. It should give a review of the machine learning techniques used and the main idea behind these methods as well as why they are chosen as candidate methods. A final summary of the study and the conclusion should be presented with take away messages. A clear and interesting presentation within the allowed length is expected.
3. **Final Report:** 9 points. The report should have a summary of the project as the first page of the report. The rest of the report should clearly explain the project with all elements mentioned in the presentation. R markdown (together with other necessary software or languages) should be used to produce the final report. The total report should not exceed 10 pages, including the summary page and references. Creative problems and solutions, concise and clear writing will help the grade of the report.

Some questions to consider for preparation of the presentation and report:

1. What is the problem considered in the project?
2. Why is the problem interesting to consider?
3. What is the difficulty involved and why is it challenging?
4. Which methods are chosen for the problem and why are they appropriate?
5. What is the solution and strategy for the problem?
6. What do we learn from the analysis?
7. Is the project interesting and inspiring?
8. Is the project creative?
9. Is the analysis complete and thoughtful?
10. What are the potential drawbacks and pitfalls, and possible improvement of the analysis?