

## Math 374 Project Guidelines

This semester we have been implementing steps in the modeling process that require a variety of mathematical, statistical, and computational methods. In this project, you will apply course concepts and engage in aspects of the modeling process on a topic that interests you.

### Project requirements

- Project proposal.** We will brainstorm project ideas as a class. Then, you and your group members will submit a brief proposal that should include answers to the following questions:
  - *Objective:* What is the objective of your study? Make sure you can succinctly articulate the objective of your study. You can use your model to help you understand the system, make a prediction, or test control strategies.
  - *Background:* What background information do you already know and what do you need to learn?
  - *Data:* What data are you using or collecting?
  - *Methods:* What methods will you need to implement to answer the questions that you're proposing in this project?
  - *Group member tasks and communication:* What is each group member's task between now and the next group meeting? How do you plan to communicate and share results and resources?
- Meetings.** You will meet with your team during every scheduled class period. I will also check in with you during this time. During one class period, you will be asked to give a brief update to the class.
- Presentation.** Each group will present during our final exam period.
- Paper.** The report must be written using appropriate mathematical style (see template used for previous papers). The final report is due at our final exam time.

### Due Dates and Grading

| Due Date: | What is due:  | Percent of Final Project Grade: |
|-----------|---|---------------------------------|
| Oct 20    | Project proposal  | 5%                              |
| Nov 3     | Short presentation of project description and preliminary results | 5%                              |
| Nov 10    | Draft of paper  | 5%                              |
| Nov 12    | Draft of slides and practice presentations                        | 5%                              |
| Nov 17    | Final presentation  | 20%                             |
| Nov 17    | Final paper   | 60%                             |