

# Projects, Chaotic Dynamical Systems

## Spring 2024

### Overview

The final project is a chance for you to dive into a topic that exhibits some kind of chaotic behavior, and to give you some more experience use LaTeX.

By now, you should have a topic ready- if not, let me know and we can discuss it. It can be a topic from the text, or it can be something we haven't discussed yet. You may work with one other person, but be sure that both of you are getting experience with LaTeX in.

The paper should use the default settings you would normally find in a paper on Overleaf. It should contain at least a few figures, and generally be between 5 and 10 pages (no more than 10, please!). That may seem like a lot until you start typing. Think of the audience for your paper as other members of our class, so keep that in mind as you write up things like definitions.

**Key point:** You should not simply copy and paste language from other sources. A big part of this paper is that you can read some semi-technical material, digest it, then present it back in your own words. Some exceptions to this are definitions and statement of theorems (which are usually standardized).

### Important Dates

Friday and Monday, we won't formally meet as a class, but I encourage you to spend time on your project. I'll be in my office and available for discussion. The due date is Monday, May 13th at 11:59PM. Sorry, but no extensions for the project.

### Rubric

- (20 pts) Generally good typesetting. Your discussion is laid out nicely (title, sections, paragraphs, etc). Length of paper is appropriate. Figures are illustrative and discussed in the text.
- (20 pts) Spelling and grammar.
- (30 pts) Mathematics are typeset nicely. The mathematics are accurate and mathematical arguments are made in a logical way.
- (30 pts) Technical points and general discussion. This means that you were able to discuss your points meaningfully, and you were able to hit the big points. The class has been about chaotic dynamical systems, so be sure you've tied your topic to that.