Stocks, Flows, and Euler's Method

FIND YOUR NAME on the list of today's studio groups, find your partner(s), seat yourselves comfortably, and please read through the rest of this document.

Today's Agenda

Today we'll wrap up the Lotka-Volterra model we started in the auditorium yesterday, discuss Euler's method for numerically computing solutions to differential equations, continue implementing the HIV model we started on Monday, and kick off Project 2.

Note that we are *not* going to spend class time on the Chapter 16 notebook. You should work through it on your own, and be sure you understand how to use `fsolve` to do design work with a model. (And you might find it worthwhile to revisit the exercise if you decide to model a thermal system for Project 2.)

Euler's Method

Explain how Euler's method works in plain English.

HIV Model

Use the space below for notes while building your update function.

Project 2 Ideation

Summarize the project idea you worked on today in one or two sentences. Do you think it could work as is? In what ways might it benefit from further refinement?

Reflection Question

What are some of your personal goals for Project 2? How do they relate to your goals for Project 1?

Next Steps

Before class on Monday, please do the following things:

- ☐ Write your name here: _____
- ☐ Write your name(s) of your studio partner(s) here: _____
- ☐ By tonight: Scan this worksheet and submit it on Canvas.
- ☐ By Monday: Read Chapter 17 and complete the reading quiz.
  Read and run the Chapter 17 notebook.
- ☐ Meet in the studios on Monday.