## **About Topics**

- topics are applications of the core concepts and programming elements covered
- there will be 9 topics in total, focusing drawing and animation relating to the natural world and image processing
  - physically-based motion
  - fractals substitution pattern
  - fractals L-systems
  - particle systems
  - boids
  - boids advanced (requires boids)
  - cellular automata
  - images filters
  - images artistic effects

CPSC 120: Principles of Computer Science • Fall 2025

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## **About Topics**

 each topic will be introduced in class with some in-class exercises for practice and some accompanying exercises to be completed for credit

**Final Grades:** The course material is divided into three groups — *core concepts*, *programming elements*, and *topics*.

- A C- or better requires demonstrating proficiency in all of the core concepts and most of the programming elements, and a 5 or better score for meeting specifications for both labs (average over all lab exercises) and the capstone project.
- A B- or better requires demonstrating proficiency in all of the core concepts, all of the programming elements, and at least three topics, and a 7 or better score for meeting specifications for both labs (average over all lab exercises) and the capstone project.
- An A- or better requires demonstrating proficiency in all of the core concepts, all of the
  programming elements, and at least five topics, and an 8.5 or better score for meeting
  specifications for both labs (average over all lab exercises) and the capstone project.
  - topics exercises will largely be completed outside of class, though there will be a few class periods used as lab periods for topics