

Genome 540 Discussion

Jan. 6th 2026



Discussion Structure

20 – 30 mins discussion, 20 mins office hours

- Lecture questions, thoughts
- Homework advice
- Related technical topics
- Debugging, get unstuck

Homework Advice

Homework Advice

Start early!

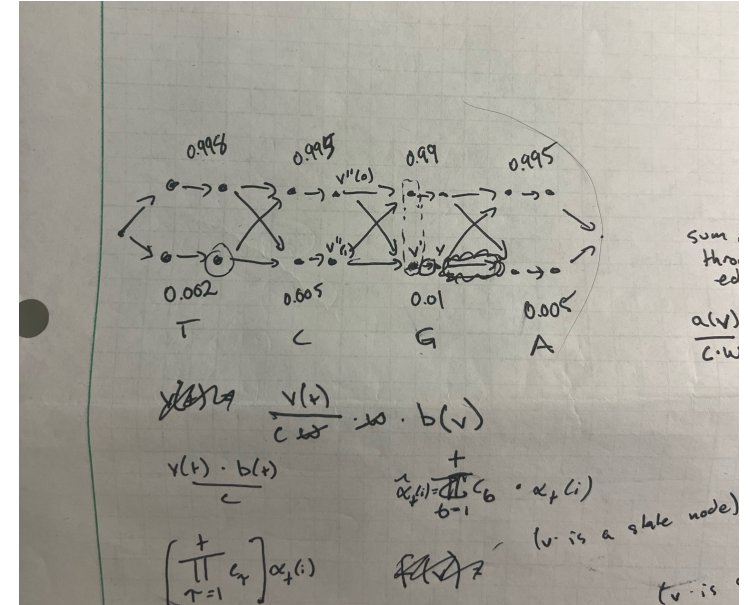
Especially if you
are starting with a
new language!

If you submit early,
I can give feedback
early, and you can
resubmit

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6 ★	7	8	9	10
11	12	13	14	15	16	17
18 1	19	20	21	22	23	24
25 2	26	27	28	29	30	31

Homework Advice

- Take your time!!
- (I like to) Use a pen and paper
- Test small chunks of code
- Know what happens at edge cases
- Code is written to be read by people, not for computers
- Read error messages starting at the top!



Homework Advice

What language should you use?

Whatever you want!

C++, C, Python are the most common

Homework Advice

C

- Backbone of almost all modern computer infrastructure
- Been around for a long time
- Requires a little more manual management

C++

- Very widely used
- Lots of documentation & examples
- Can be feature heavy (could be good or bad)

Homework Advice

Python

- Interpreted languages (generally) take longer to run than compiled languages
- Can be done, you may have to watch out for when python tries to sneak some management under the hood

Homework Advice

“C makes it easy to shoot yourself in the foot; C++ makes it harder, but when you do it blows your whole leg off.”

"There are only two kinds of languages: the ones people complain about and the ones nobody uses."

Bjarne Stroustrup

Homework Advice

AI

- Use it as a tool? Yes
- Learning syntax, translating between languages, debugging specific issues.
- Ex. “*How do I write to a file in C ?*”

Homework Advice

AI

DO NOT:

- Ask it to do the assignment
- Have it do all the thinking for you

Practically (for class): if you don't know what the algorithm is doing, debugging just involves taking pot shots in the dark.

Practically (for later): having a very tangible feel for the kinds of problems that are possible