

# Final Exam

**March 19<sup>th</sup>, Friday, 4 pm – 7 pm**

**Total 50 points**

The exam covers the entire course from week 1 to 9 (excluding week 10), including homework, quizzes, and the mid-term exam. No new materials will be tested, but functions or routines introduced in lectures, quizzes, and homework are all included.

The exam will

1. Use the Gauchospace quiz engine, just like the mid-term exam. The format would be the same. There will be only one chance to submit. No 2<sup>nd</sup> chance in any situation.
2. Use the Jupyterlab to download coding problems, solve them, and submit them using git. The format would be the same as homework. I recommend reviewing all homework to prepare this coding exam. Git's log function will be used to only review the last code uploaded before 7 pm. Any git push made after 7 pm will be ignored. It is recommended to push often before 7 pm.

A Zoom session will begin at 3:55 pm, March 19th. You should join it while you take the exam. You may keep your camera and mic OFF. As in the Midterm, the reason for Zoom is for unexpected announcements while you are taking the exam. So, keep your speaker ON. You may leave zoom once you have submitted your exam.

( <https://ucsb.zoom.us/j/87661998297?pwd=amhFak1iYWlNM2hqZkZxanJqdDA0dz09> )

The exam will open on Gauchospace on Friday, March 19th, at 4 pm sharp. The git repository invitation address will also be announced at the same time. You will have three hours to finish both.

The level of difficulty will be comparable to or a bit more difficult than Mid-term. The format of the coding problems will be similar to homework but easier since no new materials will be tested.

The exam is open book. You may watch lecture videos. You may use JupyterLab to test code. You may use MUSCLE. You may google. You may visit NCBI to search/BLAST.

**Ethics: No discussion is allowed. You should not ask anybody. You should not send messages to or receive any from anyone in any form regarding the exam. Any form of bi-directional communication about the exam will be considered cheating.**