

## CAMPUSWIRE post #1573

### 4) Final Exam

I am not completely done with the final exam, but decided to post the current status now, in case it is helpful when you are studying. I will be posting the final updated version on Wednesday (I am expecting little or no changes).

Total points: 10/40

Assessment is open and you can answer questions.

Available credit: 100% (Instructor awarded)

Python functions and PL type hints

Question	Best submission	Available points (2)	Awarded points (2)
Lectures 3-20			
Question 1		10, 6, 5, 1, 1	0/10
Question 2		10, 6, 5, 1, 1	0/10
Question 3		10, 6, 5, 1, 1	0/10
Question 4		10, 6, 5, 1, 1	0/10
Question 5		10, 6, 5, 1, 1	0/10
Question 6		10, 6, 5, 1, 1	0/10
Question 7		10, 6, 5, 1, 1	0/10
Question 8		10, 6, 5, 1, 1	0/10
Lectures 21-25			
Question 9		10, 6, 5, 1, 1	0/10
Question 10		10, 6, 5, 1, 1	0/10
Question 11		10, 6, 5, 1, 1	0/10
Coding Questions			
Question 12		10, 6, 5, 1, 1	0/10
Question 13		10, 6, 5, 1, 1	0/10
Question 14		10, 6, 5, 1, 1	0/10

You will still have the full 3 hours to complete the final exam, which was designed to be a 90 min test (so you are getting double the time!)

Two of the coding question refer to lectures 3-20 and the other one refers to lectures 21-25

For the non-coding questions in the first zone (lectures 3-20), you will have one question for each of the following topics:

1. Conditioning (and consequently, linear systems and norms)
2. Errors/convergence
3. Taylor Series
4. Sparse matrices
5. Nonlinear system of equations
6. Optimization
7. Eigenvalues
8. Floating point / IEEE / Rounding

You can find on PrairieLearn a sample final exam. **Note that this assessment does NOT represent the difficulty or length of the actual final exam.** I basically just compiled a lot of the HW questions in one assessment. You can create multiple instances of this sample final exam, to see different question variants.

**Final exam policies:**

- you can use any of the course resources available online
- you should not use physical notes or books
- you can use software/resources such as jupyter notebooks
- **you are not allowed to communicate with others about any content of the final exam (students and non-students) during the exam period, starting from December 11 until December 19.**