

The final exam is Saturday 19 November from 10:10am–12:10, and takes place in our classroom.

Sample question

Dr. S teaches an undergraduate numerical analysis class. This coming quarter she is going to a couple of conferences, and needs someone to teach two class for her. Since you owe her a big favor, you agreed to do it. The topics are: I choose 2 out of

1. Gaussian elimination/ LU decomposition.
2. Neumann series and its alternatives.
3. the Gauss-Seidel iterative method,
4. steepest descent (in the context of solving linear systems).
5. the power method.
6. Schur Factorization.
7. Least-squares problems via QR decompositions.
8. others

She wants you to give her detailed lecture notes so that she knows what you talked about. Please prepare your lecture notes and submit them. Keep in mind:

- Lecture notes are less formal than an essay, but more substantial than an outline. Not everything should be in complete sentences, but key points should be. Mix in formulas and graphs.
- You should have enough detail so that if you get confused about something during the lecture, the answer is in your notes.
- If you are not sure about a formula, write yourself a note to recheck it before class.