

4400-001 - SPRING 2022 - MIDTERM INFORMATION AND TEMPLATE

General information

Online option. The exam may be taken on Zoom if you have a valid reason and pre-arrange it with me. The exam should only be taken online if you cannot take it in person due to medical or pre-approved scholastic reasons (for example, athletics or club trip). COVID exposure is an acceptable medical reason. To pre-arrange it, please send me an email (sean.howe@utah.edu) before 8:00pm on Wednesday, March 2nd; you will not be permitted to take the exam online otherwise.

Make-up policy. **If you are unable to take the midterm at the scheduled time in class or online then there will NOT be a make-up; your final exam grade will replace your midterm grade. The only possible exception is if you have ADA accommodations, in which case you should follow your normal procedure with CDA for taking the exam.** According to the class syllabus, your final exam grade will always replace your midterm grade if it is better than your midterm grade, so it is in your best interest to take the midterm if possible.

Content covered. The topics on the midterm will be drawn from the required exercises on the homework from weeks 1-6. If you understand all of these thoroughly, you should be successful on the exam.

Computations. I will try to choose numbers so that the computations can be done by hand in the allotted time if you understand the material. You may use a calculator (see template exam instructions for details), including for modular arithmetic, but you should show work where appropriate (for example, if the problem says “use the Euclidean algorithm to...”, then you had better write out the steps of the Euclidean algorithm, even if you use a calculator for some computations on the way!)

Anticipated outcome. Based on the level of difficulty of the exam, I anticipate that the median grade will be in the range of 80-85 percent. I will be delighted if it is better!

Grades availability. Exams written in-person will be returned in class on Tuesday March 15th (the Tuesday after spring break). Grades may be posted on Gradescope and/or Canvas earlier.

Midterm Template

Exam instructions. You have **one hour** to complete the exam. You may use any resource linked to from the class website, including the book and notes/whiteboards. You may also use your personal notes and your personal homeworks. You may use a calculator, including an online calculator or spreadsheet, to do computations, but you may not use a calculator that shows work (e.g., that carries out the Euclidean algorithm automatically and shows you the steps that it took). Your work should be your own, and you may not discuss the exam with anyone else until it is finished.

Exercise 0. Name and signed statement of academic integrity (10 points).

I certify that the work on this exam is my own, that I have not discussed any of the problems with my classmates or other people, and that I have followed the rules as explained in the exam instructions.

Name:

Signature:

Exercise 1. True or False (30 points)

Six true or false questions, drawn from the topics covered in the required exercises from Weeks 1-6.
No justification is required for your answer.

Exercise 2. Computation 1 (20 points)

Similar to something in Week 2 - Exercise 1, Week 3 - Exercise 5, and/or Week 4 - Exercise 2.
Show your work – an answer alone will not receive credit.

Exercise 3. Computation 2 (20 points)

Similar to something in Week 5 - Exercise 3.
Show your work – an answer alone will not receive credit.

Exercise 4. Computation 3 (20 points)

Similar to something in Week 6 - Exercise 3.
Show your work – an answer alone will not receive credit.