

MATH223: Honours Linear Algebra

Midterm 2 information

November 4, 2024

Time and place

Midterm 2 will take place on **Friday, 8/November, 10:00am in our usual classroom** (FSC-Floor 1-Room 1221).

Material covered

Everything that we covered in class up to and including eigenvectors (Ch 5A in Axler) is the topic of the second midterm. We skipped sections 3E and 3F so these will not be examined. The focus will be on linear maps (parts starting with chapter 3) The most important concepts that you should be familiar with are:

- Linear maps.
- Null space and range.
- The matrix of a linear transformation.
- Invertibility.
- The Fundamental Theorem of Linear Maps.
- Eigenvalues and eigenvectors.

Answering questions

Unless instructed otherwise, you should give complete proofs for all the questions. You may use any Theorem or result that we covered in class or is in the textbook, but whenever you use a nontrivial result, you should refer to it.

Preparing for the test

There is a practice midterm on our course webpage that is similar in length and difficulty to the actual test. To get more practice, I recommend doing the exercises in our textbook. One question on the midterm will be chosen from the exercises in Axler (from sections 3A to 5A).

Accommodations

If you have accommodations with the UBC Centre for Accessibility, please make sure that you are registered to write the test with them.