

Module information: MATH40003 Linear Algebra and Groups, Term 2.

This part of the course will be about determinants, eigenvalues and diagonalisation, and groups in the second half. We will assume that you are familiar with the material from the first half of the module! It will be helpful if you have seen determinants, eigenvalues, and eigenvectors of 2×2 and 3×3 matrices. You can find some notes about this on the Blackboard site (read them by week 2 if you haven't seen determinants, eigenvalues, and eigenvectors of 2×2 and 3×3 matrices).

Weekly folders: Weeks run from Monday to Friday. The material for each week (videos etc.) is organised into folders; the folder for a week will normally be completed on Friday. Each weekly folder contains a brief description of what you should be doing in the module that week.

Problem Sheets: There are 9 problem classes in week 2-5 and 7-11. The problem sheets will appear in the weekly folders. A solution sheet will normally be **posted on Monday**, after the problem classes are finished. There will also be a folder called Problem Sheets where you will find all of them in one place.

Unseen problems will be made available for problem classes. Solutions to these will not be posted to encourage collaborative work. **There is no unseen problem sheet for the first week.**

Typical Weekly timeline:

1. Monday:
 - a. Problem Class 14:00.
 - b. Release of solutions to Question Sheet.
 - c. Release of new Question Sheet.
2. Tuesday
 - a. 10:00 Lecture
 - b. 16:00 office hours
3. Friday 10:00 Lecture

Authorship Note:

The notes have been written by David Evans and I (Michele) have added a section in the beginning and corrected some typos in the rest. There will still be typos.

Lectures: There are 2 lectures per week in weeks 2-5 and 6-11; there is one lecture in week 1 and 6.

Lecture notes: You should make your own notes when watching the lectures. The best notes you will have for revision purposes are the ones you make yourself; note-taking while attending or watching a lecture ensures that you remain focussed on the material during the lecture.

I have provided a full set of typed notes and will provide my handwritten notes after the lectures: these are not a substitute for your own notes. I do not provide gapped notes: the same will be true of many other modules in later years.

EdStem: Use the same site as in term 1. If you did not use this in term 1, then use it in term 2! Typical response time is 48h as it will be monitored once a day on average.

Assessment:

Term 2 Portfolio (6% of overall LA&G mark):

6% of your module mark will be made up of the following assessed work:

Weeks 3,5,8,10: Blackboard quiz, opens 13:00 on the Tuesday and closes 13:00 on the Wednesday of each week (each worth 1.5 percent).

Mid module test (week 6, 5% of overall LA&G mark):

This is a 1 hour individual exam, run in class.

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