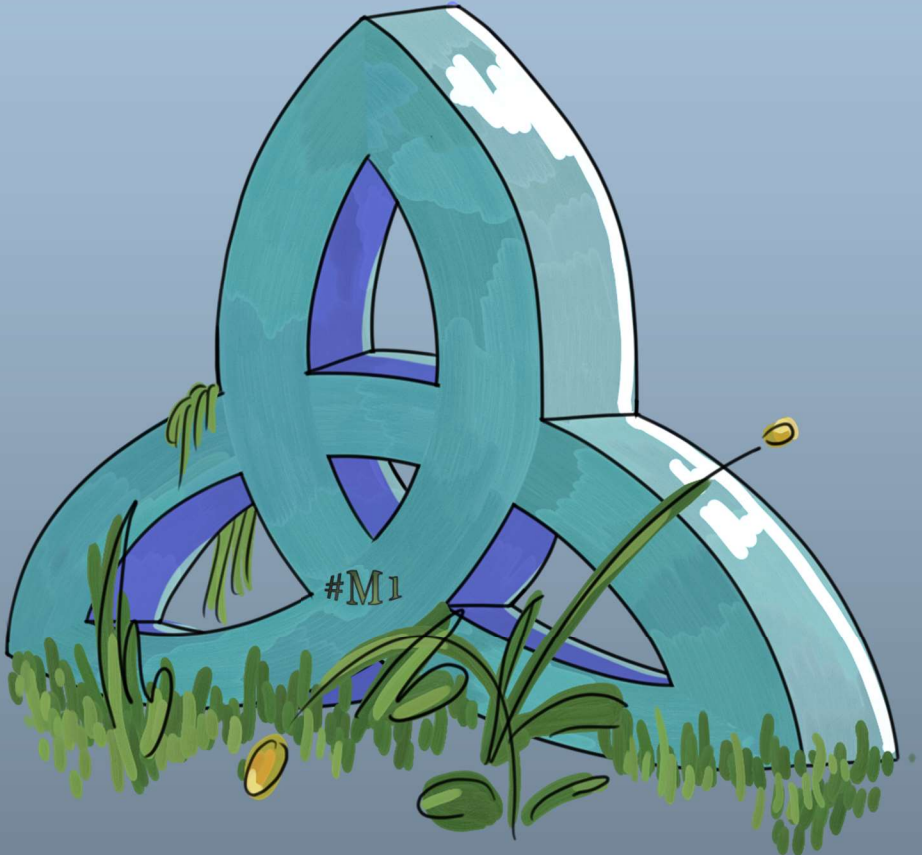




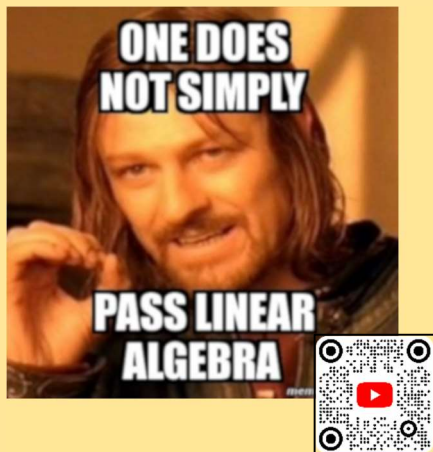
The Mini Maths Newsletter



Introduction to (Surviving) University Maths

Written By Joshua Whitby

The following article is a result of a long series of intensive interviews conducted with students from the second year Linear Algebra Course. While the advice here is in reference to that course, much of it can be applied to any course you will have at university.



Keep an eye on our YouTube Channel for the full interviews (or watch our other videos!). <https://bit.ly/3cruIkV>

Do you work weekends?

Usually try to stick to a Monday to Friday schedule but if life gets in the way (birthdays and such) use a bit of the weekend to catch up. Remember to take time for yourself and work consistently rather than cramming it all into the weekend.

Preparing for assignments?

Going through tutorials and the lecture notes is a huge help as similar questions sometimes appear, and they will always have similar logical steps that you can follow. If you find a question you're struggling with, write down the issue or highlight it and when the tutorials or office hours come up you should ask for help.

Looking at the solutions of assignments?

Absolutely! Looking over where you made mistakes will help you learn and grow. Even if you got full marks looking over the solutions will allow you to look for different methods to solve the questions. You could possibly find shorter solutions that would help in a timed scenario. You should always look at the full solutions of the tutorials as well.

Do you prepare before a tutorial?

Try to understand the relevant section of the lecture notes and its proofs. Make a list of questions if you cannot solve or understand something. The most important thing is that you know the theorems and definitions so you can work with them in the tutorial.

Do you prepare before a lecture?

Read through the lecture notes, watch the video(s) and attempt a little bit of the tutorials to ensure you're not taken off guard or surprised during lectures.

How to study the lecture notes?

Consistency is the key! Go through proofs and examples on your own time and use colours to highlight important steps. You could use flash cards to help you remember theorems and definitions and craft your own set of notes by rewriting the most important points you remember after each lecture.

What do you do after a lecture?

Read through what was discussed to make sure you're ready for the next week. Look out for mistakes in your writing/typing as the last thing you want is to study something wrong.

How much time do you spend on each course per week?

Usually depends on the week but roughly 8-10 hours. Try to break up your week so every course is covered. You can use a timetable for yourself or check out the upcoming material before the week starts. It could be that this week "course A" has only some work, but "course B" is full on. If you finish the course content for that week you *should* be ok. (The induction page has some information about the continuous assessment dates.)

Attending office hours?

Mainly during exam/assignment time but if you are struggling make full use of them but don't worry if you don't need them as you could be having a good week. Office hours also allow you to ask questions from previous weeks that your too shy to ask during the tutorials

Reading the recommended reading?

If you want more support during exam preparation you can check out the textbooks but focus on the material given to you in the form of lecture notes first. If you work on the lecture notes and tutorials consistently you probably won't have the time to read the textbook during the core teaching weeks. After the course has ended you might find yourself even

more curious about the topic and the textbook can be a very good starting point.

Do you ask questions?

Take every opportunity you can, especially in the tutorials. You will help yourself, but others will probably have the same questions. If you are struggling to ask during the lecture you can always ask at the end or over email. Remember that lecturers are there to help and will happily be there to guide you.

Reaching out to students in other years?

Using groups, such as the maths café, helps you to meet others in different years that could have different perspectives and help you greatly. Chances are they went through the same struggles as you.

Group studying?

Taking time to digest the material yourself is important but remember to not keep just to yourself. As the support you will receive from your friends will be priceless, even if it is just for comfort.

How do you motivate yourself?

It might help you to think about what it feels like to get an A. If you are just having a bad day, try to relax and make working as comfortable as possible or message a friend. Reward yourself for reaching smaller milestones regularly. It is important to have a good working environment and exercise regularly to help you get into a productive mindset.

Why should you work hard on this course?

Linear Algebra helps build the foundation for several other courses, whether it is just methods or theorems, you can never escape linear algebra (un)fortunately.

The Maths Newsletter

Previously

Last year we published four issues of the Newsletter, all of which can be found here: <https://bit.ly/3wB18Ti>



Mark Lawson – Advice for first years

Course guides for optional and final year courses

Issue 1



“Using Mathematics to Understand the Natural World” by Andy White

Issue 2



British Antarctic Survey With Jakub Stoeck

Further course descriptions for final year courses

Issue 3



Solitons and their relation to Heriot-Watt

Modelling Risk with Efthalia Tzitzili

Issue 4

Watts Next?

Learning at Heriot-Watt

There will a workshop by Pamela Docherty on the 8th of September in JW2.

Finding things

University Related: portal.hw.ac.uk

Course Related: canvas.hw.ac.uk

Make a wish 2.0

As part of the next full issue we are planning to include the results of the following survey. There is still time to fill it in and tell us what you want out of University! <https://bit.ly/3PUoowP>

How are we doing?

Have any suggestions for us? Anything you want to see us do? Fill out this other survey and let us know!
<https://bit.ly/3PUoAMz>

Who to contact

Year Co-ordinators:

Year 1 – Pamela Docherty

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Year 2- Thomas Wong

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Year 3- Alexandre Martin

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Year 4/5 – David Bourne

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School Officer – Jake: jd2017@hw.ac.uk

There will also be class representatives for each year who have yet to be decided.

Thank you for reading! This is our first Mini Edition of the Maths Newsletter; we hope it will tide everyone over until the next issue! Our current team is:

Clara Flegel
Mahsa Manzari

David Taylor
Joshua Whitby