Maths Subject Guide

What does a typical day studying Maths at Teddy Hall look like?

In the first year, there are 2 lectures every morning: at 9am and 10am. These take place in the Mathematical Institute, in the main lecture theatre, with the entire Mathematics cohort (as well as some joint honours students too). There are 2 lectures for each course per week, and 5 courses per term, in a wide range of pure and applied mathematics. More information about the course structure can be found here: https://www.ox.ac.uk/admissions/undergraduate/courses-listing/mathematics. Other years also have an average of 2 lectures a day, though a bit later on usually!

In first year, you also have 4 or 5 tutorials every week, where you go through a problem sheet you have attempted, with one other student and a tutor. Tutorials are such a great way to consolidate your understanding of content and improve your skills as a Mathematician – and our tutors do an amazing job of helping you do this.

Aside from lectures and tutorials, your time is yours – your weekly workload will consist of 5 problem sheets, which are roughly meant to be about 6 to 8 hours of work each. In practice, they can sometimes take less than this, and often they can take significantly more (if you allow them to) – knowing when to stop is very important, since it's almost impossible to get every question on every sheet perfect. The great thing about studying Mathematics is that you can be very flexible with your routine, depending on what suits you. As long as you are putting in the work and getting it done, how you structure your time is up to you!

Why do you like studying Maths at Teddy Hall?

The clear reason which separates Teddy Hall from any other Oxford colleges (for Mathematics) is the quality of our tutors. We have 3 incredible tutors in Mathematics, who are all really excellent at their jobs. They really care about their students progress, and are so supportive to us. Sometimes, one can get unlucky and end up with a bad tutor – but not at Teddy!

There are a multitude of reasons I love studying Mathematics at Oxford: the course is incredibly broad in the first year, meaning you are able to specialise as early as second year. This is something I really appreciate now, as I am able to concentrate on the areas of Maths I really love, while still having a comprehensive grounding across the spectrum of pure and applied Maths.

Another amazing thing about Oxford is the people around you – it is always possible to discuss ideas, problems etc with someone, and being around like minded people with a passion for Mathematics is so thrilling!

Thirdly, the tutorial system is absolutely fantastic – the regular opportunities to discuss your work and ideas with professional Mathematicians is an amazing catalyst for maturing as a Mathematician, and makes it almost impossible to get 'left behind'.

Application

There are several parts of an application to study Maths at Oxford. It can be quite confusing as to what is expected, so here is a breakdown of the key parts:

Personal Statement

The good news is, your personal statement doesn't matter too much! This doesn't mean you can leave it blank, of course, but at Oxford there is relatively little weight put on it. The tutors will just expect you to demonstrate an interest in Mathematics – through participation in contests, attending lectures or extra reading, for example.

MAT – Entrance Exam

The MAT is the admissions test for all Mathematics and joint schools courses at Oxford. It consists of mainly content from the 'pure' part of AS Maths – but don't be fooled into thinking it's easy! The MAT tests understanding, problem solving skills and applying ideas to unfamiliar problems, in a way that A level does not. The MAT is used as one of the main tools for deciding who is shortlisted and invited to interview – so it is crucial that you prepare for it! The best way you can do this is simply to do all of the past papers, which can be found here, along with lots of other information: https://www.maths.ox.ac.uk/study-here/undergraduate-study/maths-admissions-test.

Interviews

The final hurdle to admission is the interviews. These can often be viewed as intimidating and scary before you do them – however, they really aren't. A Mathematics interview consists of a handful of problems, posed by your interviewers. The problems are likely to be beyond the scope of the Maths you have done at school, and will probably be quite challenging. This is very much the point – the tutors want to see how you respond to facing these sorts of questions, and how you respond to their hints, leading questions and prompts. The main piece of advice for a Maths interview is just to stay as calm as possible, and allow yourself to vocalise your thoughts. The tutors want to hear your internal monologue, so they know what's going on inside your head!

This is likely to be something you haven't done before, so it's worth getting a bit of practice if you can. If your school can organise a mock interview, or you have a teacher/friend/relative who is willing to listen to you talk to them about Maths for 15 minutes, then that's exactly what you want to do! Even just trying to explain your homework to someone else, as you do it, will be very helpful. You can also try speaking aloud while doing an MAT paper, or when you are doing schoolwork – just make sure you aren't in a library, or you may get some weird looks!

We hope this guide to studying Maths at Teddy Hall was helpful, and we wish you the best of luck with your university applications!

More information can be found about Teddy Hall, Oxford and Mathematics online.