



Gravesend Grammar School

Mathematics Department

Staff:

The Mathematics department is made up of 14 specialists, both full and part-time. Staff are well qualified with a wide range of specialisms. These include KS3 specialists all the way through to Mathematics and Further Mathematics at A-Level. We are a close team and are constantly exchanging ideas and looking to improve what we do at all times. Developing new areas of knowledge is strongly encouraged with staff being given opportunities to teach across the entire age and ability range.

Results:

We are proud of the results we gain in the department. We typically gain 60 -70% Level 7+ at GCSE (but have been higher) and have been at 99+% for Level 4+ since the new GCSE grading system was introduced. Very small numbers of students would typically take the foundation level at GCSE. Results at A-Level are also very good with large numbers of students gaining A*/A grades. Typically around 200+ students would be studying the subject in year 12 and 13 at any time.

Resources:

We have a large range of resources available at all Key Stages, both digital and more traditional textbooks. Staff usually prefer to create their own resources and tailor work to their individual classes. We constantly exchange resources and swap ideas so that this impacts on the teaching and learning taking place. Schemes of work are fully laid out across the school together with corresponding assessments. The use of technology in the subject is strongly encouraged, especially at A-Level where all students use graphical calculators to support their learning.

KS3:

KS3 is an essential part of learning Mathematics at GGS. It is where we provide all of our students with those essential skills that they can then utilise at KS3 and beyond in more challenging problem solving contexts. In year 7 all students are taught in tutor groups allowing them to develop their Mathematical skills as well as building relationships with the other students. In year 8 students are placed into groups where students have similar abilities and will allow them to move forward at a challenging and appropriate pace. All students are constantly challenged as well as making sure that appropriate consolidation takes place where appropriate. Lunchtime clinics take place to help in this process.

GCSE:

Students follow the Edexcel specification. Almost all students will take the higher GCSE examination. Many students in the more able sets will also take Level 3 FSMQ Additional Mathematics and GCSE Further Mathematics. We are always looking to extend our students where appropriate and give them the fullest preparation for A-Level, which many will continue on to.

Students take part in National Mathematics Challenges and subsequent rounds. We also have students who will compete in team competitions.

A-Level:

Mathematics is the most popular A-Level in the school with numbers in year 12 and year 13 typically exceeding 100. There are many classes meaning A-Level teaching makes up a significant part of staff teaching load. We follow the Pearson A-Level and Further Mathematics A-Level. Further Mathematics is also a popular subject where students follow Core Pure 1/2 and at the moment our optional units are Further Statistics 1 and Further Mechanics 1. In addition to Mathematics teaching staff we have also mathematics mentors, who are matched with students to help them progress within the subject. Daily clinics run at lunchtimes that support learning and progress.

Students where appropriate will take part in the UKMT National Mathematics challenges and are encouraged to work more widely and independently. Many of our students will go to study Mathematics and Mathematics related subjects at degree level.

Professional Development:

The school runs its own program of CPD taking place every Friday afternoon as part of the normal timetable. Members of the department are encouraged to follow their interests and develop these so that they can impact on learning and teaching within the school. Several staff have been involved in the local Mathematics hub, which has helped them develop skills and run courses more widely across the region.

The Future:

We are aiming to continue to develop the problem solving skills of all students at Gravesend Grammar School. The Mathematics department is an exciting place to teach, with all staff valued for the contributions that they can bring. We aim to keep challenging our learners and giving them the opportunities that will allow them to go and use their Mathematical skills in the workplace and wider community. We are always searching for new challenges that will be demanding for our students and that will lead to greater achievement.

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