South Nottinghamshire Academy

MATHEMATICS AT SOUTH NOTTINGHAMSHIRE ACADEMY

"Our mission is to enable students to embrace Mathematics as a creative and highly-interconnected discipline, providing a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of curiosity and enjoyment about the subject."

SNA Maths Department, 2023

The successful applicant will join a team of six highly motivated professionals in enabling students to maximise their potential by developing a deep understanding of mathematics through engaging, challenging and enjoyable Mathematics lessons. The faculty has a friendly and supportive atmosphere with teaching and learning at the centre of everything we do and staff are supported in continually developing their practice as we all strive for excellence.

As a department, we aim to:

- Ensure all students have the best possible opportunities for success in Mathematics through consistent high-quality teaching and learning.
- Create an environment which priorities supporting teachers in feeling confident in their practice.
- Provide regular opportunities for professional collaboration in order to recognise individual strengths, share best practice and network with other Trust schools.

Development work is routinely carried out within the team, with coaching and mentoring partnerships or research focus areas. We have formed excellent relationships with the Redhill Academy Trust Maths network and take an active part in the further professional development this provides, sharing best practice, leading Network meetings as well as collaborating on development opportunities.

Mathematics is based on the first floor of our brand-new school building that opened in September 2016. We have six specialist teaching rooms and a substantial workroom. All rooms have an Interactive Smartboard and visualiser. Teachers are provided with laptops.

KS3 and KS4 Curriculum

Our curriculum is built on 3 foundations:

1. That knowledge is important to all thinking in mathematics.
2. That we understand new things in relation to what we already know.
3. That retrieving knowledge helps us to remember it for longer.

We follow a 5-year scheme of work from Year 7 to Year 11, aligned to anticipate Tiers of entry at GCSE. Students are taught in traditionally setted groups from the start of Year 7 and the faculty operates a top-heavy setting policy so as to provide increased levels of support for lower achievers.

The 2022 OFSTED report noted that

> *"…*The order in which teachers teach concepts in their subjects helps pupils to build their knowledge and skills. This enables pupils to know and do more. This is particularly the case in Mathematics and English …. Pupils achieve well in these subjects as a result*."*

We subscribe to Sparx maths to provide personalised, comprehensive and scaffolded homework which has a clear purpose and which students understand.

At KS4, given the prior attainment of our cohort, the majority of our students follow a Higher

Tier pathway. We follow the AQA Linear 8300 syllabus. The resources used to deliver lessons are largely those created and developed by staff themselves.

Where possible, teachers follow their groups throughout Key Stage 4 to provide consistency in these crucial years. A highly structured intervention programme is in place at Key Stage 4 in order to support the whole school priority of raising attainment and progress of students in English and Maths. Students continue to access Sparx maths alongside completing regular past papers to support their learning during Key Stage 4.

2021/22 results at GCSE reflect ongoing success, with 59% of students achieving grade 5–9, and 26% achieving grade 7–9.

Key Stage 5

Our Sixth Form students follow the AQA A-Level Mathematics syllabus. Teaching at Key Stage 5 involves engaging and challenging activities that are used to interest and enthuse students as well as developing understanding and practicing the skills that are required. This is in conjunction with promoting independence and the rigor needed to be successful in post-16 mathematics. We use Oxford Maths online text books to support student self-study. 2021/22 results at A-level reflect ongoing success, with 64% of pupils achieving A* - B, of which 45% achieved A*- A. The current cohort are on target for similarly exceptional outcomes.

Enrichment

Each year around 120 pupils at SNA take part in the UKMT Maths Challenge. We enter students at all three levels: Junior, Intermediate and Senior. Those students demonstrating skills in problem solving, logical reasoning and/or general mathematical ability are chosen by their teachers for entry into the Maths Challenge. We also support students by running a weekly homework club and support a chess club at lunchtimes and afterschool. There is also a group of year 10 students working towards the AQA Level 2 Further Mathematics course afterschool.

The Maths team at SNA work hard to create activities and learning episodes that build confidence and encourage active engagement of students in learning. We believe in looking for the logic in all student responses as a means to unpick misconceptions and celebrate mistakes as a means of learning.

The 2022 Ofsted report noted that, across the Academy,

"*Pupils say that all teachers encourage them to do things the 'SNA Way'. One pupil accurately described this as being 'taught to be respectful, put ourselves out there, try new things and be kind to others'*."

We are looking now to add to our team an energetic and enthusiastic teacher who can work with the department in all these aspects of Mathematics at South Nottinghamshire Academy.

In the next two years the department considers its main priorities to be:

- Continue to improve the proportion of 7-9, 5 – 9 and 4 – 9 grades at GCSE
- Continue to close the gap in attainment for disadvantaged students
- Increase the proportion of Key Stage 5 students taking a Mathematics course
- Broaden our co-curricular provision and increase the appreciation of students for Maths within careers.

Maria Ferris

Faculty Leader of Mathematics

REDHILL ACADEMY TRUST