



Wimbledon College Curriculum Intent

Our curriculum, rooted in our vision statement and the key principles of Jesuit education, provides aspirational pathways for all pupils to enable them to strive for excellence in all that they do so that they can achieve their potential and progress on their career pathway.

All pupils engage with a broad, balanced and sequenced curriculum and are supported to develop their knowledge and understanding of concepts, skills and talents. They also have access to an extensive range of extra-curricular activities which provides both a balance to their academic studies and enriching cultural capital opportunities.

We are committed to care for the individual pupil and their development as a whole person and help them to grow the personal characteristics and virtues within the Jesuit Pupil Profile. Being 'men and women for others' means that each pupil has the desire and capacity to make a positive difference in the lives of those they meet now as pupils and in their future lives.

Intent

Our Mathematics department aims to produce confident and competent mathematicians with solid knowledge of real-life numeracy skills and how they can utilise them beyond the classroom. The curriculum consists of interconnecting disciplines within mathematics and aims to develop problem solvers who can think logically through consistent challenge for all. High expectations of all pupils irrespective of any additional needs, scaffolding provided where needed and all pupils tracked to check every pupil is making excellent progress. Students are provided with opportunities to become independent learners and are supported to further develop their problem-solving skills with increasingly more complex work. Students make effective transition through the key stages and further develop their understanding beyond the classroom, consistently accessing aspirational pathways. Students are prepared for future study at GCSE, A level, university and beyond as well as having instilled in them the vital skills and knowledge to help them contribute to society – whatever their career choices.

Implementation

The Mathematics curriculum utilises a spiral approach allowing for the interleaving of skills to revisit and reinforce concepts throughout pupils' time studying Mathematics. The skill level required increases throughout the key stages and precise and engaging teaching is used to ensure that pupils' mathematical thinking and reasoning are at a consistently high standard. The Mastery Principle is being introduced as a tool to enhance pupils' understanding even more deeply. All teachers are subject specialists who collaborate on planning and delivery including discipline specific teachers at Key Stage 5. This is enhanced by subject specific uptake of internal and external CPD opportunities.

Within the sequencing of the curriculum there are elements of flexibility in the short term to respond to student progress – either adding further challenge or opportunity for further consolidation. The spacing and timing of the curriculum allows for development and revision of previous knowledge.

Pupils are provided with regular formative and summative assessment opportunities within and outside of lessons to identify progress as well as gaps in knowledge and understanding. Marking and feedback on tests and assessments is rigorous, and pupils are given time to complete metacognitive activities such as "green pen" corrections and reflections.

Pupils taught in sets to allow for appropriate level of challenge and support. If expected impact isn't being achieved for pupils, a range of intervention strategies are used to support pupils (eg: tutor period intervention, lunchtime support sessions).



In addition to lessons, to promote independent learning, pupils have access to a bespoke Wimbledon college maths website which contains a student friendly SOW which provides hyperlinked resources. Access to Dr Frost, Mathswatch, Mymaths, Maths genie, Crash maths, Exam solutions for independent study etc. To further develop pupils' exposure to the application of maths, extra curricular opportunities such as talks, competitions and trips.

Impact

In order to ascertain the impact of the Mathematics curriculum, regular formative and summative AfL occurs throughout each key stage, including in class peer/self-assessment, low stakes mini tests, half term assessments, mocks, year exams and external exams. The outcomes of these will be used to measure if pupils' have made expected progress. PLCs identify areas of weakness after summative assessment and further support is given around these topics. There is also dialogue between students and teacher on Google Classroom to address misconceptions.

To allow quantitative assessment of impact, questions in assessments clearly tracked across all key stages and intervention strategies implemented based on these areas needing developing.

In the 2022 GCSE exams, students achieved grades that were significantly above national averages with 44.7% of students achieving grades 7 or higher (nationally is 20.1%) and 94.2% achieving grades 9-4 (compared with 65.0%).

A number of students achieved grades that were 2, 3 and in one case 4 grades above their target grade (based on FFT50). Students achieved well in maths compared with other subject with a residual of 0.33 which is even more impressive considering maths is compulsory.

In the 2022 A Level series, Further Mathematics students performed well with 100% achieving an A* or A compared with 67.8% nationally.

A level Mathematics student performed similarly to students nationally. Slightly more students achieved an A* (25.9%) than those nationally (23.4%) yet students achieving A*-C was 72.2% which was less than the 79.1% nationally. This being said, this cohort of students achieve well with a value added of 0.19 and performed well compared their other subjects with a residual was 0.24.

To further ascertain positive impact of the Mathematics curriculum, student numbers to study Mathematics at A Level and University level are used in addition to students pursuing Mathematics related career paths. In 2022, 24 of our 55 A level mathematics students pursued numerate based degrees at University, of which 5 were offered Oxbridge places on science and maths-based degrees.

Involvement and engagement in both extra-curricular opportunities (eg Black Mathematicians documentary screening) and challenges (eg UKMT, weekly Parallelogram, Eedi challenges, MESME maths circle etc).