



NORTHGATE
High School

Science Department Information



Science at Northgate is part of the core curriculum for Years 7-11 with all pupils in Years 7 and 8 studying Science for 10% of their timetable, in Year 9 for 15% and in Years 10 and 11 for 20%. The school timetable consists of twenty 75-minute lessons per week. Science is taught in mixed ability groups by one teacher in Years 7 and 8 and by separate Biology, Chemistry and Physics teachers in Years 9, 10 and 11, with banding occurring from Year 9 onwards.

At Northgate the Key Stage 3 Science curriculum has been condensed into Years 7 and 8 and since September 2014 we have been following a newly written in-house scheme of work, created to fully reflect the revised National Curriculum. In Key Stage 4 we now follow the AQA Combined Science: Trilogy and the AQA separate sciences GCSE courses. More than half of our pupils in Years 9, 10 and 11 study separate sciences (Triple Science) as part of an accelerated course, taught in the usual Science curriculum time, leading to 3 separate GCSE grades. The remainder of the pupils study either Combined Science, leading to 2 GCSE grades or are able to choose to study separate sciences as an option subject choice. All members of the department are actively involved in the continued development of these courses.

In the Sixth Form, courses are offered in OCR A-level Biology A, Chemistry A and Physics A. In Biology there are currently four groups in Year 12 and three groups in Year 13, in Chemistry there are four groups in Year 12 and three groups in Year 13 and in Physics there are three groups in Year 12 and two groups in Year 13. GCSE Combined Science is offered to one group of students on the school's one-year Prep. course in Year 12.

The Science Department has an excellent reputation and its examination results are extremely good at all levels. Last year, 80% of Year 11 pupils achieved at least one grade 9-4 for Science and 73% achieved at least two 9-4 grades in Science GCSE qualifications, without using any 'GCSE equivalent' qualifications. At A-level the percentages achieving grades A*-C were 80% for Biology, 72% for Chemistry and 69% for Physics.

The Science Department consists of a large team of 17 well-qualified teachers and 4 full-time technicians who work together in a friendly and supportive environment. Teachers specialise in the department areas of Biology, Chemistry and Physics, but work outside of their specialist fields in Years 7 and 8, and very occasionally in Years 9, 10 and 11. Science is taught to Year 7 and 8 pupils in two specialist laboratories in the Lower School Centre. Science teaching for Years 9 to 13 takes place in the Science and Technology Centre where there are 13 well-equipped laboratories. Within the school there are 6 dedicated ICT rooms and the ICT provision in Science is excellent. Each laboratory has a fixed computer, projector, speakers and webcam. We have three sets of iPads for use with pupils in Science lessons, plus a set of wireless laptops, a set of digital cameras and other electronic devices. Science teachers benefit from their own iPad in addition to their school laptop and many teachers are now trialling the use of 2-in-1 laptop/surface devices to transform the delivery of lessons and interactions with pupils and resources.

We are driven by a pursuit of excellence in both delivery and outcomes and have taken a lead role in the development of teaching and learning strategies across the school. We also continue to develop opportunities for learners to engage with science outside of the curriculum and are building strong links with higher education, business and the wider community. We continue to strengthen and build on extensive links with our feeder primary schools, partner secondary schools and teacher training institutions. The department is always looking for new ways to engage pupils both in and out of lessons and all staff are involved in these developments.

We are very proud of the Science Department at Northgate and of the achievements made by all of our learners. We are very keen to appoint high quality teachers who support our aims and who are willing to actively contribute to the continued development of teaching and learning strategies.