

GRAVESEND GRAMMAR SCHOOL SCIENCE DEPARTMENT (CHEMISTRY)

We aim to provide an enjoyable, caring and challenging environment where all our students are encouraged to be confident, enquiring, independent and interested learners ready to take the opportunities provided in an increasingly technological world.

Recent staff relocation and promotion has left an opportunity to appoint a new Chemist. Making a successful appointment will give the school 12 full time subject specialist teachers in Science, working primarily in laboratories and with excellent access to both practical resources and IT. A Head of Science leads the Department supported by subject leaders for Biology, Chemistry and Physics, a STEM lead and a Key Stage three co-ordinator.

All students follow a bespoke KS3 science curriculum in Years 7 and 8. From Year 9 the students are setted and study the separate Edexcel Biology, Chemistry and Physics 9-1 GCSE courses. The bottom set is entered for Combined Science GCSE. The vast majority of lessons taught at KS4 are taught within teacher specialisms, all KS5 science is taught by specialists. We have a well-developed and integrated approach to the assessment and feedback cycle which helps us to achieve consistently excellent GCSE results. The department is very well resourced. We recently received a substantial grant from the Wolfson Foundation to further expand our practical provision and are using this to ensure our students have access to state of the art equipment, including an IR spectrometer. We strongly encourage the use of purposeful practical work wherever appropriate.

Numbers in all sciences at A-level are consistently healthy, with most students electing to continue with at least one science. Numbers in Chemistry are healthy and have been growing over recent years. There will be three groups studying chemistry in both Y12 and Y13 next year. A very healthy number of students go on to study science related degrees after completing their A levels at GGS. There is a well established and successful medical society that many Chemistry students are members of. Students in the school have a very positive attitude towards science and particularly enjoy a 'hands-on' problem solving approach. Examination Boards are Edexcel for all GCSE as well as A level in Chemistry.

We are lucky to have both teachers and technicians in Science who are a mixture of youth and experience with a wealth of subject and classroom expertise. This, therefore, presents an exciting opportunity to have a significant influence in moving forward the teaching of Science in the School. The department and school provide a very supportive environment where teachers are provided the space and guidance to develop their craft. There will be plenty of opportunities to contribute to curriculum development and planning, developing teaching pedagogy and classroom practice, improving/sharing subject knowledge and developing assessment.

The candidate should be prepared to work closely with colleagues, in a friendly and supportive environment, utilising subject and pedagogical expertise, creativity and innovation to help develop

the team. The candidate should also have the enthusiasm and leadership skills to ensure that there is sufficient vigour and rigour in the teaching of Science.

Gravesend Grammar School provides a positive atmosphere where learning can flourish and where your teaching can develop. This is also a great opportunity to lead a significant contribution to an excellent and improving results profile for the School as a whole.

A Level Chemistry at Gravesend Grammar School

At Gravesend Grammar School we are privileged to work with students who are both very capable and enthusiastic about studying the Sciences. Their is plenty of scope to motivate very able students into becoming excellent Chemists Our sixth form students all study the full two year A level Edexcel course. The Chemistry course aims to promote a very detailed knowledge and rigorous understanding of the subject and its application to a world of scenarios. We expect an improving results profile, working for outstanding examination outcomes. There is a rigorous approach to assessment and feedback with a real opportunity for teacher subject expertise to be utilised. We also endeavour to share enthusiasm and engage students in their learning by following a practical investigative approach to drive learning.

We aim to build on solid foundations from GCSE and promote learning through a rigorous problem solving approach, comprehensive subject knowledge and the exceptional relationships we build with students. We follow a practical approach to teaching and learning with a view to developing understanding through application and promoting excellence in practical technique which students can continue to hone as they complete the more challenging A level course. The aim is always to give students first-hand experience of procedures and practical techniques wherever possible.

A level students currently have nine hours per fortnight of timetabled lessons taught in laboratories with excellent access to IT and technical support. There are currently three Chemistry groups in both Year 12 and Year 13, with each group having two specialist Chemistry teachers. The department is high achieving, forward thinking and ambitious. Expectations of student performance are high and specific help is targeted at individuals and groups where required. There is an excellent opportunity for teachers to make a real difference working with some very able and interested students.

2022 Chemistry Examination Results -

GCSE	9-7	50%	A level	A*/A	22%
	9-5	93%		A*-B	44%
	9-4	99%		A*-C	68%
				A*-E	100%

January 2023