



## **GRAVESEND GRAMMAR SCHOOL SCIENCE DEPARTMENT**

We aim to provide an enjoyable, practical 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.

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 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. In Year 9 the students are setted and all study the separate Edexcel Biology, Chemistry and Physics 9-1 GCSE courses. All science lessons are taught by qualified scientists. 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. We strongly encourage the use of purposeful practical work wherever appropriate.

Numbers in all sciences at A-level are consistently healthy, with Physics being a particularly popular choice (consistently around 50 students per year for the last 5 years) and good numbers moving on to study science and engineering related degree courses. Students in the school have a very positive attitude towards science and particularly enjoy a 'hands-on' problem solving approach. A-level Examination Boards are Edexcel for Biology and Chemistry and AQA for Physics.

We are lucky to have both teachers and technicians in Science that are a mixture of youth and experience with a wealth of subject expertise. This, therefore, presents an exciting opportunity to have a significant influence in moving Science in the School forward. Teachers within the department tend to be fluent users of IT and much of the teaching in science is outstanding. There will be plenty of opportunities to contribute to developments within the department and whole school, for example, in curriculum development, teaching pedagogy, improving/sharing subject knowledge, assessment for learning and tracking progress.

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 Physics at Gravesend Grammar School**

At Gravesend Grammar School we are privileged to work with students who are both very capable and enthusiastic about studying Physics. The department is well resourced and well supported. All our students study the full two year A level AQA course. The Physics course aims to promote a very detailed knowledge and rigorous understanding of the subject and its application to a world of scenarios. We expect, and consistently achieve, outstanding examination outcomes. There is a rigorous approach to assessment and feedback with a real opportunity for teacher 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 investigation and promoting practical competence 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 Physics groups in both Year 12 and Year 13, with each group having two specialist Physics 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.

#### **2019 Physics Examination Results**

<b>GCSE</b>	9-7	65%	<b>A level</b>	A*/A	21%
	9-5	97%		A*-B	50%
	9-4	99%		A*-C	73%
				A*-E	98%

March 2020