



DARTFORD GRAMMAR SCHOOL

A LEARNING COMMUNITY DEVELOPING INTERNATIONAL CITIZENS

APPLICATION PACK

Enjoy making a difference at.....

Dartford Grammar School

An IB World School

Post: Science Technician (Full Time)

Start Date: As soon as possible

£15,583.56 actual pro rata salary (£18,000 fte)

Pension Scheme

Cycle to Work Scheme

The post is a full-time, term time only, permanent position.



The school is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment. An enhanced DBS check is required for all successful applicants.

ABOUT US

A learning community developing international citizens

Dartford Grammar School is a selective secondary academy for boys, which admits girls to its sixth form. There are six forms of entry to Year 7, and all of the students joining the school are from the top 25% of the ability range. The students come from Dartford, neighbouring towns and villages, and nearby London boroughs. The current roll is 1,532, including 616 in the sixth form.

Curriculum

Dartford Grammar School offers a unique seven year innovative curriculum based on the educational philosophy of the [International Baccalaureate](#) Organisation (IBO). This begins with the [Middle Years Programme](#) (MYP) in the lower school and then concludes with the [Diploma Programme](#) (DP) in the Sixth Form. The International Baccalaureate (IB) is offered around the world in 146 countries and we are proud that we are a leading IB World School, offering a truly international education. The IB courses are crucial to our ethos encouraging students to be independent, creative and highly successful lifelong learners. We are the first British state school authorised to offer the IB Middle Years Programme to pupils in Year 7 to 9. However, no prior experience of the International Baccalaureate is needed, and the successful applicant will have the opportunity to undertake appropriate CPD as required.

In Years 7 – 9, students develop their knowledge and understanding of their subjects through the skills based Middle Years Programme which is underpinned by the philosophy of the [Learner Profile](#). In Years 10 and 11, students follow a broad range of academic GCSE subjects, including English Language, English Literature, Mathematics, either double or triple Science, two Humanities from History, Geography and Religious Studies and a further option from Art, Drama, Music, Design Technology, Computer Science and Physical Education. We are the only school nationally where all students sit GCSE examinations in two Modern Foreign Languages, one from Mandarin Chinese or Japanese then either French, German, Latin or Spanish. Our innovative Creativity Week programme allows all students to enjoy a cross-discipline approach to their learning and develops independence and autonomy.

In the Sixth Form we offer the IB Diploma to approximately 600 students each year. The Diploma offers students a fulltime real education that equips them with the key skills and a broad but deep subject knowledge to succeed in higher education or employment. The IB Diploma is recognised around the world and so allows students to access universities both in the United Kingdom and internationally. Through the IB Diploma, all students study English, Mathematics, a Language, a Science, a Humanity and either an Arts subject or a second choice from Languages, Science or Humanities. Students choose their six subjects from two levels of entry; three at higher level and three at standard level. Additionally students complete a 4000 word [Extended Essay](#), as well as a study of [Theory of Knowledge](#) and an exciting Creativity, Activity and Service project (CAS). It is anticipated that the successful applicant will have a considerable sixth form teaching timetable.

Our entire curriculum, in line with the IB Learner Profile, encourages students to be internationally minded and aware of the importance of cultural diversity while embracing British values. Our curriculum offers academic rigor with the balance of a vibrant co-curriculum where all students actively participate in the wider life of the school. All of this is underpinned by our commitment to pastoral care and student wellbeing.

Students at Dartford Grammar School enjoy very high academic success. In 2019, the introduction of more rigorous GCSE exams saw our students gain 68% L7-9 grades from all entries. In the last year of nationally published results (2019) and for the third consecutive year, the school's P8 score placed the school highly for value added (highest placed boys school in Kent in 2019). Outcomes for students continue to be exceptional, with 76% of all GCSE grade L7-9 in 2020, and 86% of all grade L7-9 in 2021. Our Sixth Formers gained an average UCAS points score of 217 in 2019, and 231 in 2020 and 2021 respectively (new tariff). An average IB point score of 36.9 (out of 45) was achieved in 2019, with 38.7 in 2020, and 38.8 in 2021.

The L3VA will present the school as one of the highest performing sixth forms in the country for value added. Almost all of Year 13 students proceed to university with 100% of students successful at their first or second choice and 77% successful at Russell Group universities. In 2021, our students received outstanding grades that were precisely in line with teacher predictions.

Ofsted Inspections

The school has been identified four times by Her Majesty's Chief Inspector of Schools (most recently in May 2011) as one of England's most successful schools and colleges, showing a sustained period of outstanding achievement.

Early Specialist Status

In September 1995, the school became one of the first two language colleges in the country. The school is committed to internationalism. While maintaining its high levels of strength in all curricular areas, the school is established as a centre of excellence for the learning of languages, offering tuition in ten. Following the 2008 Ofsted inspection the school was awarded Science as this third specialism and most recently achieved an additional Specialism Quality Mark in Sport.

The school is a leading Confucius Classroom, a leading Japan Foundation and Goethe Institute school and has been reaccruited with the International Schools Award at the highest level. Dartford Grammar School was the Sunday Times IB School of the Year 2017 and 2020, when it was also awarded the IB School of the Decade. Furthermore, in September 2018 the school became a Hub of Excellence in MFL Pedagogy, a new government initiative to raise standards and uptake in languages. This will see us work as one of nine lead schools in the country to help and support a number of local schools to develop their language teaching. The school's reputation for collaboration has also been recognised through our new status as a National Hub of Excellence for Computer Science.

The school has been awarded 'Teaching School' status and takes the lead in initial teacher training across a local alliance of primary and secondary schools, providing additional professional development opportunities.

Buildings and Facilities

The school, founded in 1576, has occupied its present site since 1866. Additional buildings have been constructed since then, the major works in last 10 years being listed below:

2008	extension of sixth form centre adding five teaching rooms;
2009	the remodelling of the Mick Jagger Centre, to provide additional teaching rooms and new laboratories and a Food Technology suite;
2011	new sixth form study suite;
2012/13	extended sixth form centre;
2013/14	new science department;
2013/14	new Key Stage 3 transition area;
2014/15	new Performing Arts Centre and rejuvenation of part of the Hardy building;
2015/16	new dining hall and additional laboratories;
2017/18	new sixth form centre;
2017/18	extension and improvements to the Arthur Jones pavilion;
2018/19	new school shop and print room facility.

Pastoral Support

The school has a strong pastoral system operating from Year 7 to Year 13. The school is divided into Key Stage units, and each year group has a Curriculum Manager who oversees all aspects of the students' development. The school provides 3 Higher Education Advisers and a specialist Careers Adviser.

Extra-Curricular Programme

The school is exceptionally rich in extra-curricular activities. It offers 16 sports and competes with others in at least eight of them each year. Teams regularly gain county, regional and national success, and many students gain representative honours at one or more of these levels. The school achieves high standards in music, and has an orchestra, wind band, choir, chamber choir and many other ensembles. Drama productions are frequent.

The Performing Arts Faculty benefits from the facilities of the Mick Jagger Performing Arts Centre. There are many other clubs and societies, with debating always a popular activity. The school's impressive programme of community service is regarded as a particular strength. The school benefits from many close links with Europe, China and Japan. There are regular overseas cultural and sports trips, and other international visits.

The Duke of Edinburgh's Award is a notable strength: nearly all students in Year 10 complete the Bronze Award, with a majority going on to Silver. Gold Award expeditions take place in both the UK and overseas, while the school has also offered international trips via Operation Wallacea.

External Links

The school has a very active Parents' Association, which provides valuable assistance and support. The school has strong links with local industry and with Higher Education. It has extensive links with many other institutions, and is also part of the world-wide International Baccalaureate Organisation network.

What the School Offers Teachers

The school provides its staff with the experience of teaching able and well-motivated students in an environment with high expectations of behaviour and well-developed systems of teacher-support. The school has a national reputation for the quality of its programme of professional development. The programme includes much that falls within specific subject areas. Staff well-being is a priority in the school, and staff social occasions, staff football and staff tai-chi are all popular, as is our weekly staff breakfast on a Friday morning!

The school is committed to participation in initial teacher training. Other aspects include a course for newly-qualified teachers, preparation for middle management, development of existing middle managers and preparation for senior management. While the school's extensive programme of overseas visits give many staff international experience, the school ensures that its staff development has a further international dimension, for example in IB courses. Staff members have access to the school's excellent facilities for sport and the performing arts.

Becket Sports Centre and The Mick Jagger Centre for the Performing Arts

Out of school hours the facilities of both centres are shared with the local community. They are managed by school staff, reporting through independent management structures.

The Becket Sports Centre has been extended and improved and comprises a sports hall and fully equipped fitness studio, with a separate aerobics/training room, which has a sprung floor, allowing dance sessions to be held. The Mick Jagger Centre includes two auditoria (seating 200 and 350 respectively, both with retractable seating), 8 music practice rooms, dance studio, exhibition space, two music rooms and a Drama Studio. It is a base for 20 community organisations, and runs a small commercial programme attracting a range of talents and performers.

Website

Further details of the school, including breakdown of performance figures, can be accessed through: www.dartfordgrammarschool.org.uk

Applicants are warmly invited to visit the school before applying.

THE SCIENCE DEPARTMENT

The Science Department at Dartford Grammar School has operated with science specialism status since 2009 and continues to be a centre of excellence for science education. It is based in a self-contained suite of very well equipped rooms, in the Stephenson Building. It contains 14 laboratories and a lecture theatre, 2 preparation rooms, stores and science staff offices. All laboratories are fully equipped with practical apparatus, dedicated ICT facilities with projectors, white boards and visualizers.

Staffing

The Department's staff includes the equivalent of 16 full-time teachers, all graduate specialists. They are supported by four full-time technicians. The current management structure comprises of a Head of Department, an Assistant Head of Department, Science College Manager, KS3 Science Manager and KS5 subject leaders.

The Department is involved in initial teacher training through the Kent Training Group SCITT. Staff from the Department deliver some of the theoretical aspects of the training as well as the day-to-day practical mentoring of the trainees. Additionally, the Department is highly experienced in training science teachers through salaried and non-salaried routes.

Courses

Dartford Grammar School has a timetable that consists of 30 periods per week and each period is 50 minutes in duration. In Key Stage 3, Year 7 classes have 6 periods of science, Year 8 classes have 4 periods of science and Year 9 have 6 periods of science; two in each of the three science disciplines. The Key Stage 3 course is delivered over 3 years and it provides a solid foundation for GCSE sciences. There is a heavy emphasis on practical work and discovery as well as developing investigative skills. In Key Stage 4 students study AQA Biology, AQA Chemistry and AQA Physics courses. The overwhelming majority of students are examined on the AQA Separate Sciences with a minority studying an AQA Combined Science course. In Year 10 and Year 11 students have 6 periods per week; two in each of the three science disciplines with subject specialist teachers for each.

Sciences are an extremely popular choice in the Sixth Form, which has 550 students following the International Baccalaureate Diploma Programme. All students study at least one Group 4 subject as part of the diploma, higher level subjects have 5 lessons and standard level subjects have 3 lessons per week. The Science Department offers HL Biology, SL Biology, HL Chemistry, HL Physics, SL Physics, SL SEHS, HL SEHS and SL ESS.

Many students choose to continue their study of science at university, with the medical sciences being a popular choice. Students benefit tremendously from the departments successful Biomedical and Ethical Society.

Extracurricular activities

The Department has a tradition of enriching courses with many additional activities. Key Stage 3 students can attend a very popular Science Club and/or Electronics Club, KS4 students can enjoy a successful Engineering Club and KS5 students can participate in KS5 Science Clubs and the Biomedical and Ethical Society. Students also have a number of visits during the year and a wide range of gifted and talented opportunities are on offer through the departments Science College.

In the Sixth Form, students attend university lectures and visits to University College, Kings College, Imperial College, Surrey University and Greenwich University. We have a programme of high profile visiting speakers. Annually, we have public lectures that focus on new advances in scientific research. Students have many opportunities to attend study visits. Our physics students go to CERN, Geneva. We have biology and ecology fieldwork visits to the Alps and Slapton Ley in Devon. A science exchange with a school in Hanau runs annually, and work-shadowing associated with the pharmaceutical industry in Switzerland is available. We also have science links with schools in Japan and China.

An annual Science College Careers Fair is attended by students in Years 11 and 12. During this day, students have the chance to speak with an extensive range of ambassadors relating to science-related careers.

The Science Department's Science College also offers a successful STEM week and Science Summer School for aspiring medics.

ROLE PROFILE

Science Technician
Part time: Term time, Line Manager: Senior Science Technician
Main purpose of the role: To assist the Science Department in delivery of the Science curriculum
The Science Department at Dartford Grammar School The department consists of 14 laboratories and a lecture theatre. There are 2 separate preparation areas where the technicians do much of their work. The department is committed to courses which require a large amount of practical work in the separate disciplines of biology, chemistry, physics, ESS and Sports Science.
The Role of the Technician <ul style="list-style-type: none">• To be responsible to the senior technician for the day to day running of the laboratories. To give support to the senior technician as and when required.• To assist in the work of all sciences as circumstances require.• To be responsible for maintaining the general safety and security of laboratories, preparation areas, science stores and lecture theatre.• To keep up-to-date with current health and safety recommendations provided by Cleapss• To work efficiently to ensure practical requests are met in good time, are operational and feedback is given to teachers when necessary.• To prepare lesson materials including assembling equipment, preparation of solutions and the making of simple apparatus.• To clear lesson materials after use and maintain the laboratories in a clean and tidy condition, including restocking of solutions, equipment and chemicals.• To clean glassware and keep laboratories stocked with basic equipment.• To make simple repairs to fittings and equipment.• To provide equipment and materials for Science Clubs.• To assist in the preparation of all the equipment and materials needed for practical assessments, coursework and extended essays.• To assist with the ordering of chemicals and equipment and to assist in the regular stock-taking• To co-operate and communicate as a member of the technician team.• To attend and contribute to technician meetings as agreed with the Senior Science Technician.• to attend staff INSET as required• To update skills and subject knowledge as appropriate.

NOTES

- 1 The responsibilities are subject to the general duties and responsibilities contained in the statement of Conditions of Employment.
- 2 This job description allocates duties and responsibilities but does not direct the particular amount of time to be spent carrying them out, and no part of it may be so construed.
- 3 This job description is not necessarily a comprehensive definition of the post. It will be reviewed at least once each year, and it may be subject to modification or amendment at any time after consultation with the holder of the post.

THE APPLICATION PROCESS

Completed application forms should be sent, by post, to the Headteacher, Mr J C Metcalf, Dartford Grammar School, West Hill, Dartford, Kent DA1 2HW or by email, to Mrs M Bexley (HR Manager) mbexley@dartfordgrammarschool.org.uk

Closing date for applications: Monday 3rd October 2022

Interview date: To be confirmed

The school may interview early in the case of an exceptional candidate.