

KING EDWARD VI HANDSWORTH SCHOOL FOR GIRLS

The Physics Department

Staffing

Science is the largest department in the school and takes a key role in implementing new learning and teaching strategies. We run several science based clubs and use links with Mathematics and Technology to increase the girls' awareness of STEM related careers.

The Science Department at King Edward VI Handsworth is extremely well equipped in terms of practical equipment, lab space and experience of the existing staff. We have a history of successfully mentoring ECT and those embarking on ITT.

The Science Department consists of 12 well equipped laboratories and a classroom. These are all maintained by our experienced team of 3 Technicians. All labs are equipped with interactive screens.

At present the Science department has the following members of staff:-

Physics Department

Mrs Parinaz Ijakipour (Subject Leader Physics) – Particle Physics and Cosmology (Msci)

Miss Joanna Merrick – Electronics and Information Engineering (B-eng)

Mr Joseph Parkin - Physics (Bsc)

Mr Andrew North (part time) - Physical Electronics (Bsc)

Mr Charles Trotter (Assistant Head i/c Data) - Electrical and Electronics Engineering (B-eng)

Mr Allan Lock (Physics technician)

Biology Department

Mrs Harbinder Flora (Subject Leader Biology)

Mrs Emma Duggal

Mrs Adelaide Orme (part time)

Ms Shane Huda (part time)

Mrs Mahmooda Begum (part time)

Mrs Trudy Kirby

Miss Ameena Khan

Miss Halima Khan (Biology Technician)

Chemistry Department

Mr Jonathan Whitehead (Subject Leader Chemistry)

Mrs Gurvinder Bajaj (part time)

Mrs Harleen Assi

Miss Natalie Samuels

Dr Ross Perrins

Dr Charles Erb (part time)

Mr Chakib Hamdi (Chemistry Technician)

Curriculum

Physics

Our aim is to be a friendly, collaborative, stimulating and supportive department. We strive for excellence through challenging, well-designed curriculum that is informed by pedagogical research. Our aim is to break down gender-based perceptions of Physics and encourage more girls into considering Physics and Engineering related careers. We have been very successful in this endeavor and every year a significant number of our girls go on to study Physics and Engineering at a range of highly respected institutions and Russel Group universities. We update our schemes of learning continuously to reflect the latest advances in pedagogical research.

Years 7 and 8

Students have one 50min lesson per week. The students follow the Science National Curriculum at KS3, which has been designed and adapted to reflect our academic setting.

Year 9

In year 9, students finish the National Curriculum at KS3 and are introduced to concepts from GCSE physics (AQA), which they will build upon in year 10 and 11.

Years 10 and 11

All students follow the AQA Physics specification and do Separate Sciences at GCSE. The departmental results are excellent with the vast majority of the girls achieving grades 7-9 (\sim 75%) with a significant proportion of the cohort achieving a grade 9 (\sim 30%). The students receive 5 x 50min lessons per fortnight usually as two doubles and one single lesson.

Year 12 and 13

Physics is a popular subject at A-Level. The department usually has between 25 and 40 students studying Physics in Year 12 in two teaching groups who then continue onto Year 13.

The Department follows the AQA specification and all students study for A-level Physics. We do not do AS levels. The students are taught Physics in 11 x 50min lessons per fortnight usually as five doubles and one single lesson.

The curriculum at A-level is divided between two teachers. The optional module chosen is Astrophysics.

As mentioned above, a significant cohort of our A-level physics students go on to study physics or physics related fields at university and apprenticeship levels. Our students thrive on the academic setting of the school and the academic rigor of our lessons.

Workload

We, as a department, do not undertake book-marking. We encourage staff to do 'live-marking' and make use of lesson time to provide feedback to students.

We only mark summative assessments for years 7 and 8.

We mark summative assessments as well as one homework per topic at year 9, 10 and 11.

We mark summative assessments and one piece of homework per topic at year 12 and 13.

Our curriculum is assessment informed, and marking is always followed by action to adapt our teaching accordingly.

Further Information

To find out further information about the Physics Department please log on to our website at www.kingedwardvi.bham.sch.uk and follow the following links: Teaching and Learning > Curriculum > Physics. Information on events within the department can also be found on our website in the Gallery.

Mrs Parinaz Ijakipour Subject Leader Physics April 2025