

SCIENCE DEPARTMENT

Teacher of Chemistry full / part time

The Head of Science (a physicist) leads all subject areas of Astronomy, Biology, Chemistry, Environmental Science and Physics, with the assistance of a Second in Science (KS4 coordinator), a Teacher in Charge of Biology and a Teacher in Charge of Chemistry.

The school day is structured as a two-week timetable divided into 5 one-hour periods (25 period week)

The Post

We are looking to appoint a member of staff who is able to demonstrate an innovative and forward-thinking approach with effective communication and interpersonal skills. As well as an enthusiasm for Science and good ICT skills you should enjoy working with young people. This post is a full-time position to teach Science at KS3 and KS4 and Chemistry or Biology to KS5. Interest in teaching Environmental Science is desirable but not required.

Staffing

The department consists of six full-time and eleven part-time science teachers, supported by four laboratory technicians for Biology, Chemistry and Physics. The department has a very strong ethos of shared, common resources and the teachers work together, facilitated by having a shared workroom for the science staff.

Facilities

The Department consists of six full-sized and two smaller laboratories with four prep rooms and a large Science staff office. All the laboratories have interactive whiteboards and data projectors installed. Classes can be booked into the ICT rooms in order to access the Internet and to facilitate production of multi-media presentations and the school allows students to access the school's network via wifi on their own portable devices during lessons where appropriate. One ICT room is located in the Science block along with a Science classroom.

Extracurricular activities

Lunchtime clubs include a practical Science club for the younger years, an Astronomy club during the winter months, a seasonal pond club, a KS4 homework support and weekly drop-in support sessions for the A Level subjects. Students are encouraged and supported to enter many competitions, including the Biology, Chemistry and Physics Olympiads and Cambridge Lower Sixth Challenge. Trips to activities organised by universities are a regular occurrence. We have recently become affiliated with the Arkwright Scholarship.

The Curriculum

Key Stage 3 (Years 7 and 8)

There are 6 periods per fortnight for science in Years 7. In Year 8 there are 7 periods per fortnight. The schemes of work have been designed to develop students as scientists and lay a foundation for their GCSE studies. Progress is monitored regularly via end of topic tests and extended investigations. KS3 work is compressed into two years. Each group will be taught be one or two science teachers who teach all three sciences.

Key Stage 4 (Years 9, 10 and 11)

We are following the OCR Gateway Triple Sciences syllabus for all students who start GCSE in Year 9. Hence the GCSE is a three-year course. GCSE groups generally have three science teachers, each teaching one subject area.

In Year 9 students have seven periods over a fortnight with twelve periods in Year 10, and twelve periods in Year 11.

KS4 Science Teaching (from 2024-5)

| Year | Programme | Teaching allocation | Staffing | Groups |
|------|---|-------------------------------------|--|--------------------------------------|
| 9 | Year 1 KS4 Triple Science GCSE | 7 1-hour periods over two weeks | 2 periods allocated to Chemistry and Physics 3 periods allocated to Biology | 6mixed ability groups of 26 |
| 10 | Year 2 KS4 Triple Science GCSE | 12 1-hour periods over two weeks | 4 periods allocated per subject | 6 mixed ability groups of 26 |
| 11 | Year 3 KS4 Triple Science GCSE | 12 1-hour periods over two weeks | 4 periods allocated per subject | 7 mixed ability groups of 23 |

Key Stage Five

For each A level class there are nine one-hour periods over two weeks per subject in Year 12 and Year 13, usually taught by two members of staff. The students studying in the department apply to a variety of university courses with a high number opting for medicine and veterinary science each year, as well as pure science degrees and vocational courses such as, physiotherapy, engineering and nursing. Students are offered places to study medicine, veterinary science, earth sciences, geology, biological sciences, natural sciences, physics, chemistry and the like at Oxbridge and most of the top universities.

Biology

There are currently 8 classes at A Level, 4 in Year 12 and 4 in Year 13. All students follow the OCR Biology H420 specification with practical work assessed through OCR PAG tasks. There are drop-in lunchtime help sessions offered once a week

Chemistry

There are currently 6 classes at A Level, 4 in Year 12 and 3 in Year 13. All students follow the OCR Chemistry H232 specification. Similarly, practical work is assessed through OCR PAG tasks. There are drop-in lunchtime help sessions offered once a week.

Physics

There are currently 5 classes at A Level, 3 in Year 12 and 2 in Year 13. Physics follows the OCR Physics H556 specification. OCR PAG tasks are used to assess practical work. There are drop-in lunchtime help sessions offered once a week.

Environmental Science

A Level Environmental Science was launched in September 2022 and we currently have one class in Year 12 and one class in Year 13. Environmental Science follows the AQA 7447 specification. There are lunchtime drop-in sessions offered once per week.

Astronomy

Year 12 students are offered the opportunity to study GCSE Astronomy. This is a one-year course which follows the Edexcel 1ASO specification. We have a telescope and binoculars available which students can loan out to complete their observations.

