

Science

In Years 7 & 8, students are taught in mixed ability classes following a course that incorporates Biology, Chemistry and Physics. Lessons are taught largely in our well-equipped laboratories that support our department's practical approach to Science. The range of practical activities aims further to develop scientific knowledge and understanding as well as introducing the skills of designing, planning, conducting, analysing and evaluating scientific experiments. Students are assessed throughout Years 7 & 8 through topic tests, end of year examinations and assessed practical activities. In Year 9, students study distinct courses in Biology, Chemistry and Physics and are taught in sets. From Year 9, students begin studying topics from the GCSE course in each of the sciences.

Currently at GCSE, students either study for a qualification in each of Biology, Chemistry and Physics (Triple Science) or follow the Double Science course which covers topics from each of the sciences and culminates in students being awarded two GCSEs. Both of these courses provide students with an opportunity to study a range of aspects of modern Science, building on and broadening their knowledge and further developing their practical skills.

To widen student experience of science beyond the classroom, we currently invite students to Whipsnade Zoo in Year 7 and the London Aquarium in Year 8. A Level biologists visit Epping Forest to develop their skills in sampling techniques and A Level physicists fly over to CERN to learn more about the Hadron Collider. In school, KS4 and 5 students are also invited to the fortnightly dissection club where they have the opportunity to dissect a wide range of organisms.

Students can also take part in activities to develop their creativity, problem-solving and employability skills, such as a wide range of STEM (Science, Technology, Engineering and Mathematics) projects. These include F1 in Schools, ORBYTS Astrophysics project with UCL, Engineering Education Scheme, FIRST LEGO League Robotics Competition, AstroSoc, STEM Club, RSC Chemistry Challenge and STEM Lectures at Watford Boys

Visits to local companies and national events, such as The Big Bang Fair, Oxford University (Materials and Physics Day) and Kew Gardens have also been offered to students.