Science



The Science Faculty is strong faculty with good results at Key Stage 4 and the motivation and aim to continually improve. The department prides itself on its friendly open atmosphere with a strong team spirit and this means that a very high level of support is provided to new members of staff.
The Faculty is a very forward looking team and there is a strong sense of moving on and developing new ideas. To this end, there is a strong commitment to using INSET to develop individuals who can then inform new initiatives. We have a good uptake of Sciences at KS5 and have a creative and very practical based approach to A Level.

Staffing

The Science department at Sir John Leman High School consists of 13 full time Science teachers and several part time teachers, some of whom work in other departments within the school. There are 2 full time Science and 2 part time technicians supporting the teachers.

Facilities

There are 13 Specialised Science labs, 7 of which have fume cupboards. Two labs have recently undergone major refurbishment and all labs have a permanent PC and ceiling mounted projector.

In Year 7 and 8, students are organised into sets. They have four lessons per fortnight. In Year 9, students are organised into sets and are taught by a pair of Science teachers; they have 5 lessons of Science per fortnight. The students begin their Key Stage 4 courses in year 9.

In Key Stage 4, we aim to offer students a wide range of options to allow them to find the most appropriate course to follow. All of our courses are offered by Edexcel, the exam board we have worked with for the last 6 years. Combined Science students in year 10 and 11 currently have 5 lessons of Science per fortnight, and Triple Science students have 8.

As part of the options process students can choose Triple Science, working over three years with specialist teachers to gain separate Biology, Chemistry and Physics GCSEs. They will study the same units found in the Double Science GCSE, but they will also cover additional content in year 11. Sets 1, 2, 3,and 4 will study Double Science GCSE, gaining two qualifications. This group will work with two Science teachers. The assessment for the Triple and Double Science courses is currently based upon the completion of written examinations in year 11.

At Key Stage 5 we offer A Levels in Biology, Chemistry and Physics and a BTEC Applied Science course.

Enrichment, Support and Extra-Curricular Activities

- A comprehensive intervention programme is run for GCSE and AS/ A2 students by members of the team, including after school classes and intervention sessions.
- We run a STEM fortnight that involves students from all year groups participating in STEM activities.

Teaching and Transition Learning

Key Stage 3

Students are set following a SATs style examination sat by all students in October of Year 7. We teach a KS3 curriculum written in house that involves a variety of units based on topics such as X Factor, The Gadget Show, Dinosaurs and Lost World. Each unit combines Physics, Chemistry and Biology topics and is assessed using SATs style type tests. The units are motivating and fun for students but cover the required content as laid out by the national curriculum. It is a very practical course and has strong links with the Skills curriculum.

Key Stage 4

Students have the option to follow the Triple science route as part of the year 9 option process, with the remaining students following GCSE Combined Science.

Key Stage 5

At key stage 5 we offer both traditional A levels in Biology, Chemistry and Physics and a Vocational alternative, BTEC in Applied Science.