



Longsands Academy



Science Department

Aims of our Science Teachers



- 1) To deliver the highest quality Science teaching to all of our students.
- 2) To thoroughly equip our students for today's technological world.
- 3) To enable our students to be fully aware of the implications and application of Science, so that they can make judgements on environmental and social issues.
- 4) To enthuse our students with a lifelong interest in scientific matters and to have fun learning!

- 5) To ensure that our students fulfil their potential in examinations.

These aims are achieved, in part, by investigations in which students have to think for themselves, diverse questioning techniques and through the delivery of well planned, high quality Science lessons.



Science is a heavy user of ICT and all teaching staff are given a laptop and iPad to facilitate this. We use the academy's VLE as a means of sharing our resources more effectively across the department and our students have benefited from the innovative ways in which we have adapted our schemes of work in order to make full use of this valuable resource.



All Science labs are equipped with interactive white boards and multimedia projectors. The Science department is well supported by the academy and each year we are usually able to fund the development of new initiatives to support learning & teaching within the Science department.

As a Science teacher, you will be responsible for:

- National Curriculum teaching in all Sciences at KS3 and KS4.
- Development of KS5 resources for your subject specialism.
- Record keeping and monitoring of pupil progress through target setting.
- Contributing to the development of schemes of work.
- Assessment and regular marking of students' work.
- Examination preparation, marking and writing of reports.
- Generating display material.
- KS3/KS4/KS5 coursework administration.
- Initial responsibility for classroom discipline.

Schemes of Learning

The Science department KS3 curriculum has been written by our own team to reflect a shorter two year course with a greater emphasis on the key investigative skills required for the new Science GCSEs. The GCSE courses start at the beginning of Year 9.

KS3 and KS4 are well resourced with a generous allocation of text books and multimedia resources designed to compliment and enhance their delivery.

For KS4 we currently offer AQA Separate Sciences, and for double Science we follow the Trilogy pathway.

A-level Teaching

There is considerable interest in the Sciences at A Level and we offer Biology, Chemistry, Physics and Applied Science (Level 3). It is likely that the newly appointed member of staff would have the opportunity to teach an A-level subject.

Student Setting

All pupils across key stage 3 and 4 are banded into academic sets which are regularly reviewed and refined. At Longsands we value every set and aim to meet or exceed 3LoP for all our Science learners.

Our Philosophy...

We believe that our learners should enjoy Science, find it rewarding and gain knowledge and understanding by investigating things for themselves.

The Science teachers, TAs & technician staff form a team. The ability of a newly appointed teacher to support this team is considered essential.

Accommodation

The Science Department is housed within two adjoining blocks linked by a Science prep area that consists of twelve labs, one dedicated ICT suite and two A-Level classrooms. The department also



has its own work area, crew room, greenhouse and garden. Currently a lab refurbishment programme is due to be completed by August 2015.



The Curriculum

Key Stage 3 students receive three hours of Science per week. We have written our own scheme of learning and commence our GCSE courses in January of Year 9.

Double Science students have eight hours of Science per fortnight split between two teachers. *Triple Science* has thirteen hours per fortnight and is split between three teachers.

Science Department Staff

Alf Lesurf	Assistant Headteacher: Director of Science
Tom Smy	2 i/c Science, Head of Biology
Wendy West	Biology Teacher
Liz Murphy	ITT & Student Teacher Mentor & Biology Teacher
Lizzie Whitehead	Biology Teacher
Sara Winters	Biology Teacher
Clare Given	Biology Teacher
Joe Boyd	Head of Chemistry
Alexis Ivett	Chemistry Teacher
Daniel Berry	Senior Assistant Headteacher, Chemistry Teacher
Peter Martin	Head of Physics
Sam Blake	Physics Teacher
Linda Albone	Physics Teacher
Christopher Armitage	Biology/Physics Teacher
Sarah Miller	Lead Teacher & Science BTEC Coordinator
Rachel Dowling	Senior Technician
Samantha Saberton	2 i/c Technician
Julia Bresler	Technician
Michael Redrup	Technician
Elena Villarta	Lead Science TA

Extra Curricular

We have a STEM and CREST club for students in key stage 3 with a small (but growing) number of Year 7, 10 and 12 students who have been entered for Salters Science Festivals.

Sixth formers have the opportunity to spend a day at GSK and MSD and guest speakers are invited to the department to support our learning and teaching. We regularly send our sixth formers to various lectures, events and competitions throughout the year.

In conjunction with Technology, we grow food in the Science garden and conduct experiments on crop yields by comparing organic with more conventional methods of farming.



Intervention, revision and mentoring sessions are regularly run across all key stages in order to support our Science learners.

We help the local primary schools within the Longsands' catchment area with their KS2 Science work by a combination of visits either to their school or by sessions at Longsands Academy as part of our Primary Liaison programme.



Contact the Director of Science:

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