Science Department Handbook

2023-24

Willingdon
COMMUNITY SCHOOL

School Curriculum Intent

The curriculum at Willingdon Community School offers a broad, balanced, personalised and challenging educational experience, which builds on students' experiences in the primary phase of their education.

It aims to provide all students with the knowledge, understanding, skills and attitudes which are necessary if they are to become successful learners who enjoy learning, make progress and achieve the best they are capable of.

The curriculum model at Willingdon is a dynamic model, reviewed annually to take into account educational developments at national, local and school levels. The school is committed to maintaining its consistently high levels of achievement in the core subjects of English, Mathematics and Science; at the same time we continue to place a high value on the humanities and creative subjects, and provide a wide range of opportunities for students to pursue their interests in these areas at GCSE level.
To provide a curriculum fit for their future, building on the successes of their past. (Ready for post 16 and life) which allows our students to be safe, happy, well informed global citizens who have experienced a 5 - year progressive and dynamic curriculum where students have the opportunity to aspire and achieve and a broad and balanced curriculum which is inclusive and reflective of our local needs

Science Intent

Science Vision: *Curious Minds Discover*

To engage and inspire a new generation of inquisitive scientific minds to tackle the novel challenges that face our world!

The Science Department

All students at Willingdon Community School study a balanced course in Science at both Key Stages 3 and 4. These schemes of work follow the new KS3 curriculum and have a greater emphasis on personal, learning and thinking skills. At Key Stage 4 pupils take 5/6 hours of science per week, following AQA syllabus or a Science. D groups study separate sciences worth 3 GCSE's, remaining sets are studying combined science.

The department consists of 9 teachers. The department consists of 9 well-equipped laboratories, 8 with their own preparation rooms attached.

Teacher Name	Responsibilities
Phil Osborne	Head of Department – Science
Mia Angella-Foyle	Deputy Head of Department - Science
Laura Connolly	Assist Head of Dept – Science (LGBT lead)
Felix Smith	Assist Head of Dept – Science (STEM lead)
Jason Dubs-Fisher	Assistant Head Teacher
Auryn Merridue	Science Teacher

Joy Barrett	Science Teacher
Rebecca Ellis	Science Teacher
Rhianna Timms	Science Teacher

Technician Name
Alyson Burton (Head Technician)
Lesley Mitchener
Katy Barrow
Mandy Mooney

Curriculum Road Maps

Biology Year 7 - 11 Chemistry Year 7 - 11 Physics Year 7 - 11

GCSE Exam Assessment

Combined Science – 2 Science GCSEs

GCSE	Assessed maths skills	Assessment	Weighting
Biology	10%	Two papers each out of 70 Duration: 1:15h	Each paper contributes 16.7% of total GCSE
Chemistry	15%		
Physics	20%		

Separate Sciences – 3 GCSEs – Biology, Chemistry, Physics

GCSE	Assessed maths skills	Assessment	Weighting
Biology	10%	Two papers each out of 100 Duration: 1:45h	Each paper contributes 50% of total GCSE
Chemistry	15%		
Physics	20%		

Lessons of teaching per Year Group

Year	Lessons per week
7	5
8	5
9	5
10	6
11	6

SCIENCE POLICIES

Assessment

KS3- every topic will have an extended writing task and an end of topic quiz. At scheduled points through the year all of each year group will sit the same exam. This will be recorded in a central science mark book for whole year group comparison. This information can be used to determine the best groups for individuals.

KS4- every topic will have an extended writing task and an end of topic quiz. At scheduled points through the year all of each year group will sit exams. These will be recorded in a central science mark book for whole year group comparison. Yr 10 will sit a mock towards the end of the year. Yr 11 will sit 2 mock papers through the year in line with the school calendar. This information can be used to determine the best groups and tiers of entry for individuals.

Marking and Feedback

Teachers mark their classes scheduled whole year group exams. These are recorded in the central science mark book for whole year group comparisons. Once told papers can be given back to pupils for DIRT tasks. Feedback can be in either written or verbal form.

End of topic quizzes and extended writing tasks can be peer/self-marked and undergo DIRT by pupils. These can then be taken in and checked by staff, looking to inform pupils on their work and their marking/ DIRT. Feedback can be written or verbal.

Homework

Homework is set via edulink/educake as school policy – Y7 & 8.

Homework is set via edulink/educake/EXAMPRO or GCSE questions – Y9, 10, 11

If a pupil does not complete the homework in time, the teacher should record this via a behaviour point. If multiple homework are missed then please inform the science leadership team who will then follow this up.

Literacy

Science has a vast variety of key vocabulary, definitions and command words. In exam pupils are not graded for SPAG. Due to this literacy in science is different to many other subjects.

ICT

Science chromebooks are available for use in science lessons

SMSC and British Values

SMSC Statement
British Values Statement