

## **Science Department Information 2017/18**

The approach to learning in Science is strongly influenced by the “How Science Works” aspect of the National Curriculum. We encourage students to be curious, creative and questioning. This links well with the whole school approach to learning “Building Learning Power” which promotes these qualities and skills. Science is a popular subject at Wren with large numbers of students taking Triple Science and A level classes in all three science subjects. Results across the department are strong with positive value added outcomes at GCSE. We were delighted with the progress of our Year 13 cohort with a large number of students going on to study Science related degrees at prestigious universities. This included Physics at Manchester and Exeter, Mechanical Engineering at UCL, Dentistry at Manchester and Kings, and Medicine at UCL. Science is very much at the heart of our growing Sixth Form.

The department currently has twelve teachers representing all three subject disciplines. We work collaboratively to develop curriculum material, assessment and monitor student progress. We have weekly planning and evaluation meetings which facilitate this process. The department also benefits from a number of student curriculum advisors who attend meetings and provide useful feedback. We have recently re-written our Key Stage 3 curriculum to reflect national curriculum changes and have moved to a two-year key stage 3. Triple Science (separate sciences) and Combined Science Trilogy (AQA) are currently offered at GCSE. At Key Stage 5, we follow AQA for Biology, Chemistry and Physics. We will continue to develop the best possible curriculum and assessment at Key Stage 3, 4 and 5 to meet all our learners’ needs.

The department is led by a Head of Science who is supported by subject Heads of Biology, Chemistry and Physics and a Key Stage 3 co-ordinator. A dedicated member of the leadership team supports the department in the management and strategic planning of the subject area.

The Science Department is well resourced with two experienced Science Technicians in post to facilitate our lessons and the development of the curriculum. We also are supported by a subject specific Higher Level Teaching Assistant. Science is taught in single-sex groups at the Academy and these groups are set according to ability. The single sex aspect is an exciting development in which we can consider the potential need for different teaching and learning approaches without compromising the curriculum content. This approach is also followed in Maths and English.

The Science Department at Wren Academy consists of six generously sized laboratories, two prep-rooms, a staff work-base two additional classrooms, a lap top trolley and ICT Suite. All rooms are equipped with digital projectors.

Science enrichments run successfully giving over 100 students the opportunity to explore a range of exciting and interesting projects including astronomy, data-logging, engineering and forensic science. Last year a large number of students represent the Academy at various competitions, with some advancing to regional finals this year. We have been on a number of curriculum based trips including the Science and Natural History museums, London Zoo and Friary Park to investigate local ecology. We also recently ran a whole school mixed-gender bridge and helicopter design activity. All of Year 7 have been taken on a cross-curricular trip with the Maths Department to Greenwich. We have also developed our A-level links with UCL where our Year 13 students have received teaching directly from a practising observational astrophysicist. We are currently working with the Institute of Physics as a stimulating Physics Link School to develop the delivery of Physics. The successful candidate would be expected to help extend our extra-curricular activities as well as contributing to the further development of the science curriculum.

Please contact Amer Malik, Head of Science if you wish to discuss this post further.

[amer.malik@wrenacademy.org](mailto:amer.malik@wrenacademy.org)

Wren Academy is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment.