

The Sciences Learning Area

Information for prospective applicants for the position of Science Teacher

The Sciences Learning Area is a collaborative working group including all three Sciences including A Level and BTEC. The main aim of the group is to deliver a quality learning experience for students, which enables them to appreciate the links between the three disciplines. We are working towards this through sharing some of the outstanding practice in the three subjects, observing each other, and participating in action research throughout the school year with other subject areas.

This is an exciting time for us all as we develop our vision for new curricula and try out new strategies, and an ideal opportunity for a new teacher in the Learning Area to bring new ideas and make a positive contribution to something that could have a huge impact on the progress of our students.

The successful applicant will join an enthusiastic team who work well collaboratively, both supporting each other and sharing ideas; we are moving towards continued improvements in our work practices.

The Science Learning Area

The Science Department currently consists of 8 teaching staff, two of whom are part-time. There are also three technicians supporting the delivery of Science. The technicians frequently come into the classroom to offer practical support during lessons. Within the team three of us hold the following roles:-

3rd i/c: James McManus

Teaching and Learning development and outreach role: Improving the quality of classroom practice.

KS5 lead for the Department

2nd i/c: Robin Durston

Leading Assessment and reporting and behaviour.

KS3 lead for the Department

1st i/c: Daniel Robinson

Leading strategy, teaching and learning and student outcomes.

KS4 lead for the Department

Curriculum Organisation

Our students follow a 3-year KS3 programme based upon the "Exploring Science" curriculum. Students in Year 7 and 8 are taught in mixed ability sets as tutor groups. In Year 9, students are then set by ability to enable us to better cater to the needs of different abilities. Set changes are reviewed during the year. Throughout Year 7, 8, and 9, students will complete further assessments to track their progress. The focus in Key Stage 3 is the development of science-specific skills as well as factual learning, and many lessons are centred on nurturing these skills.

After Christmas in Year 9, students begin their GCSE courses. Each group at this stage is taught by a single teacher. The students begin the AQA Trilogy Combined Science course at Higher and Foundation tiers, dependent upon ability.

Students in Years 10 and 11 continue their GCSE study, with some having selected to follow a triple science pathway in their options. These pupils have an additional 5 lessons per fortnight, and are taught by three subject specialists. Pupils who continue on the GCSE Combined Science pathway have two teachers, spread over 9 lessons a fortnight.

Our post-16 provision has also been differentiated to cater for varying student needs. Students who have completed Triple Award Science or Combined Science with Grade 7 are able to follow AS and A-level courses in Biology (OCR), Chemistry (OCR) or Physics (Edexcel). These subjects have traditionally been popular with students and are well subscribed. Students gaining a Grade 5 at GCSE can pursue the BTEC Forensic Science course we offer. The continuous assessment model with less emphasis on exams is particularly suited to some students, and in the time since its introduction, we have seen student numbers on this course rise steadily. In both cases our groups are a mixture of students from Wyedean and those who have come from other schools in the area.

Departmental Accommodation/Resources

The department has eight classrooms located together in a separate block within the school. All of them are fully equipped laboratories suitable for practical work. Most of the labs were refurbished in 2005/6 and are in very good condition. One further room will be refurbished in the very near future. All rooms have projectors installed and are fully networked and 6 labs have interactive whiteboards.

All equipment and chemicals are stored in the same block, so lessons are well resourced at all times. The Science department has its own ipads which can be booked for lessons, as well as 16 Easysense data loggers with various sensors.

Developments

In our role as part of a Learning Area, the main development we are working on is the development of more collaborative activities, both in curriculum time and as extra-curricular activities, as well as the sharing of ideas/teaching practice. Additionally, we are seeking to support students further in their studies by providing more independent working assignments through the school VLE and more support/revision sessions after school hours.