## Oak Field School Policy for Science

#### **Philosophy**

Science can be described as the study of things in the world. It involves observing, measuring and experimenting to test ideas. It offers children and young people the opportunity to find out how, and why things work in their immediate environment and beyond.

#### **Aims**

- Oak Field School aims to provide access to relevant scientific experiences for all students. Through the teaching of Science all pupils will be given opportunities to think, learn and develop an interest in, and curiosity about the world around them. Pupils will achieve this through practical activities and also by using their senses to explore and investigate.
- The Science Curriculum will endeavour to support, encourage and motivate all students to reach their full potential. The teaching of Science will ensure the recognition of the diversity of the curriculum needs of students of different ethnic groups, gender, disability and age range. The resources and activities used will ensure the appropriate balance in terms of equal opportunities for all students.
- All students will have opportunities to develop effective knowledge and understanding of Science and positive self-images in an atmosphere of mutual understanding and respect.

# Strategies for putting policy into practice

Whilst National Curriculum requirements are adhered to, appropriate programmes of study are adapted to provide all pupils with relevant and appropriately challenging work at each key stage.

The method of delivery is varied and is designed to meet the needs of the individual learner. This is achieved by:

- Returning to skills and concepts from earlier key stages.
- Maintaining, reinforcing, consolidating and generalising previous learning as well as introducing new knowledge, skills and understanding.
- Enabling some pupils to access Science by personal exploration using a sensory approach.
- Focusing on one aspect or a limited number of aspects, in depth or outline, of the age related, breadth of study and content.

- Including experiences which allow for pupils at the early stages of learning to gain knowledge, skills and understanding in Science as part of other subjects, or which take place in everyday activities e.g. choosing materials, investigations involving food and cooking.
- Using the breadth of study for Science to provide context in planning referring to other rolling programme topics appropriate to age and needs of the pupils.

Science is taught in either termly or half-termly topics. Science in the foundation stage is based on the Early Years Developmental Outcomes and goals as part of 'Knowledge and Understanding of the World'. Each Key Stage has a Rolling Programme of topics to ensure continuity and progression across all areas. Students in Key Stage 4 and the Sixth Form continue to explore Science through a range of accredited ASDAN courses.

## **Roles and Responsibilities**

The science co-ordinator will work with teachers to ensure that all students have the opportunity to experience all aspects of science and that all areas of the science curriculum are covered from Foundation to the Sixth Form. The science co-ordinator will purchase, organize and maintain teaching resources.

### **Assessment and Recording**

Assessment is continuous and informs planning. Individual pupils are set individual progress targets and learning objectives are integrated into differentiated planning. Progress is monitored at least twice a year with appropriate numerical and learning targets set as a result. Achievement is recorded on pupil work, pupil observations, weekly recording sheets, annual reviews and electronically using classroom monitor, e-portfolios and learning journeys.

Summative assessment, via the Classroom Monitor assessment tool should take place at appropriate times throughout the year e.g. following the completion of a topic. It is the role of all those teaching Mathematics to ensure that assessments are regularly updated.

# Monitoring, Review and Evaluation

Science planning will be monitored by the science co-ordinator on a termly basis and feedback and support given to ensure progression and continuity throughout the school. Lesson observation will be carried out on an ongoing basis with feedback given with the aim of raising the attainment in science.

Reviewed September, 2015 To be reviewed January, 2018