

Oakfield High School & College

Science & Horticulture Policy

Aim:

To enable learners to question and investigate the science in the world around them and make informed judgements about the usefulness and impact it has on them.

Objectives:

- To develop scientific thinking and the ability to question their own lives and the future of the world
- To be able to use scientific ideas and models to explain theories and develop them creatively to generate and test theories.
- To have an awareness of the ethical and moral implications of using and applying science.
- To know current applications of modern science and its roots in many different societies and cultures.

Science

Key Stage 3

Knowledge, Skills and Understanding

Learners will:

- Gather information from observations and investigations.
- Understand the importance of healthy eating, regular exercise and the effect of drugs, including alcohol and tobacco, on the body.
- Learn about the different properties of compounds in relation to the number and type of atoms and their arrangement.
- To study the properties and behaviour different waves.
- Know that electrical devices are designed to make use of a variety of effects caused by electric currents, including heating, chemical changes and magnetic effects.
- To study shape and motion in terms of pressure effects, linear motion and turning moments.
- Know the appropriate methods to communicate scientific information, including ICT, digital photography, data logging, as well as text based approaches.

At a level appropriate to their relevant Pathway (Emerging, Launch, Breakthrough, Foundation, Developing and Intermediate)

Key Stage 4

At KS4 learners complete WJEC Entry Pathways, Open Awards Level 1 in Science, AQA Entry Level Certificates and/or AQA GCSE qualifications.

Knowledge, Skills and Understanding

Learners will:

- Critically analyse and evaluate evidence from observations and investigations.

- To think about the ethical and moral implications of research into scientific issues.
- To balance the advantages and disadvantages of new developments in research.
- Understand that the availability of non-renewable resources depends upon reducing waste, conserving energy, developing and using renewable energy sources as well as reducing environmental resources.
- Know that geological activity is caused by chemical and physical processes and that this activity shapes our environment.
- Know the appropriate methods to communicate scientific information, including ICT, digital photography, data logging, as well as text based approaches.

Horticulture

Key Stage 4

At Key Stage 4 learners have the option to follow the programme for study for an Entry Level qualification in Floristry Skills or Countryside Skills.

Knowledge, Skills and Understanding

Learners will:

- Complete appropriate vocational accreditation allowing them develop knowledge and understanding in a particular subject area;
- Develop work related skills through the appropriate courses;
- Gain practical experience in their chosen subject specialism;

Key Stage 5

At Key Stage 5 learners can follow the programme of study for Entry Level 3 and Level 1 Accreditation in BTEC Landbased studies and ABC Level 1 in Practical Floristry

Knowledge, Skills and Understanding

Learners will:

- Complete appropriate vocational accreditation that reflects individual learner aspirations.
- Complete work skills accreditation and take part in various events to develop transferable skills including team work, communication and self-management.
- Access a transition curriculum and explore further vocational and educational settings.

Monitoring arrangement

The Headteacher and leadership team:

- will monitor the subject through the Oakfield self-evaluation schedule and monitoring schedule which are reviewed annually.

Governors:

- will monitor the work of each subject through the Oakfield self-evaluation schedule and monitoring schedule which includes a schedule of Departmental meetings, and Departmental leader reports to governors. This schedule is set annually.

Departmental leader:

- will monitor learners work;
- amend schemes of work based on suitability of use;
- amend and monitor risk assessments for practical lessons and the animals;
- provide regular subject evaluations for governors and SLT;
- attend subject link meetings to liaise between department and SLT.

Additional Information (Subject specific) i.e. Risk Assessments, resources

Risk Assessments

In the science and demonstration lab the appropriate CLEAPPs and COSHH guidelines are followed. Any additional risk assessments for visits, practicals and the animals are completed and authorised by M. McCarthy at Wigan Council.

Animal therapy

Oakfield prides itself in the range of small animals it keeps as pets in the laboratory. These animals are cared for by the learners and are present to enhance the learning environment, encourage responsibility and appropriate behaviours within the room. They are also used to support Biology lessons in Behaviour, Adaptation, Selective Breeding and Ecosystems.

Homework

Regular homework is set in Science through Show My Homework and in line with the Homework policy.

Links to other policies:

- Teaching and Learning;
- Behaviour for Learning;
- Monitoring;
- Assessment for Learning;
- Homework;
- Health and Safety.

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| Signed Executive Headteacher: | C Taylor |