

SCIENCE LEARNING AREA – INFORMATION

General :-

The Science Department, which boasts an experienced and very hard working staff, is a forward looking, successful and thriving part of Castell Alun High School. All three sciences are amongst the most popular courses in the Sixth Form, with two Physics, Biology and Chemistry classes in both the lower and upper Sixth Form.

A great many of our Sixth Form students choose to study science based courses in University and we are very proud of the lifelong love of science we engender in so many young people at Castell Alun.

Aims :-

To :-

- Stimulate and invest in, an enjoyment of science for all learners so that they maintain that interest through school life and beyond;
- Encourage each learner to achieve their full potential, through the exploration of science;
- Develop in learners those skills and abilities which are relevant to the practice of science and will be of benefit in everyday life;
- Enable learners to become confident citizens in a technology based society, and to make informed decisions on matters of scientific importance;
- Create an interest in, and respect for, the environment and an understanding of the need for conservation;
- Promote an awareness of the usefulness and limitations of scientific methodologies
- Promote an awareness that the study and practice of science are co-operative and cumulative activities and are subject to social, economic, technological, ethical and cultural influences and limitations.

Staffing :-

Mrs. Helena Wade, Science Learning Area Manager

Mrs. Gail Caswell Jones, Key Stage 4 Coordinator

Mr. Jeremy Roberts, Key Stage 3 Coordinator and Physics Subject Leader

Mr. David Swale, KS4 WBQ Coordinator

Dr. Martin Galvin, Chemistry Subject Leader

Mr. Neil Eve, Student Development Manager

Mrs. Holly Reeves, Biology Subject Leader

Mr Andrew Duffy, Student Development Manager

Mrs. Carlotta Dunn

Mrs. Sarah Llewellyn-Davies

Mrs. Victoria Pearn

Mrs Kathryn Jackson

Dr Nicola Davies

Ms Kelly Vaughan

Mr Jack Evans

Mrs. Elizabeth Roberts, Technician

Mrs. Janet Hayes, Technician

Mrs. Lisa Wheildon, Technician

Facilities :-

The Science Learning Area has ten purpose built well equipped laboratories, each having a computer projector and access to the internet. The area is serviced by three preparation rooms with IT facilities.

Curriculum

Key Stage 3 :-

Year 7 students are taught in mixed ability groups and then set by ability for Years 8 and 9. The courses for Year 7, 8 and 9 have been developed within the school.

The Year 7 course is based upon work undertaken with partner primary schools and there is regular collaborative working groups.

Key Stage 4

Two pathways are currently being offered:-

WJEC Separate Science and for the majority of students the WJEC Double Award qualification.

Key Stage 5

The Department offers AS and A2 courses in Biology, Chemistry and Physics. In addition, the Level 3 Diploma in Medical Science is also offered.

All specifications are WJEC.

Extra Curricular Activities

Study Club runs regularly for both KS4 and 5 which offers opportunities to students to extend their learning beyond the school day. Other 'science' based activities and visits are offered in order to stimulate and motivate students within the Learning Area, which also includes the delivery of GCSE Astronomy.