BTEC Level 3 National Extended Certificate in Applied Science

Head of Department – Mrs K Fox

Department Information

This two year, vocationally focussed A Level equivalent course covers all three science specialisms of Biology, Chemistry and Physics, focussing on their application in the real world. The highly practical nature of BTEC Nationals is delivered in our well-resourced laboratories, with all specialist equipment being available to students so they can develop a high standard of practical experience throughout their studies.

Why study this course?

Science is everywhere and developing an appreciation and understanding of science along with the skill base that this course develops is a highly desirable quality that employers and Higher Education appreciate. This course supports progression to higher education, to an apprenticeship or entry level employment in the science sector. Students studying Applied Science often do so to keep a valuable science qualification at Level 3.

Aims of the course

The requirements of the qualification will mean that learners develop the transferable and higher order skills which are valued by higher education providers and employers. Students will develop skills including how to plan investigations, collecting, analysing, and presenting data and communicating results which support some of the skills learners need to progress to higher education, employment, self-employment or training.

Students develop into resilient learners who are able to manage their time and workload, meet deadlines and think for themselves.

Course outline

Content is split into four units of work:
Unit 1 – Principles and Applications of Science 1 (External Assessment through examination)
Unit 2 – Practical Scientific Procedures and Techniques (Internal assessment – portfolio assignments)
Unit 3 – Science Investigation Skills (External assessment through examination and synoptic internal assessment)
Unit 4 – Options Unit: (Internal assessment – portfolio assignments)
One unit from the following:

- Unit 8: Physiology of Human Body Systems
- Unit 10: Biological Molecules and Metabolic Pathways
- Unit 13: Applications of Inorganic Chemistry
- Unit 15: Electrical Circuits and their Application.

How am I assessed?

There are three mandatory units (Unit 1,2 and 3), one internal and two externally assessed. Learners must complete and achieve at Near Pass grade or above in all mandatory external units and achieve a Pass or above in all mandatory internal units.

Where does this course lead?

The qualification carries UCAS points and is recognised by higher education providers as contributing to meeting admission requirements for many courses if taken alongside other qualifications as part of a two-year programme of learning, including, but not exclusively, those which are science-related. The qualification can be taken as part of a diverse programme, leaving progression options fully open. It can also give context to subjects which would benefit from some scientific background. This will depend on the combination of qualifications chosen. For example, taken alongside:

- A Levels such as Mathematics and Design and Technology to progress to engineering
- A Level in Psychology and Sport to progress to sport psychology courses
- A Level/ BTEC in Health and Social Care to progress to nursing courses and healthcare professions
- A Level in Sport to progress to sport and exercise science courses
- A Levels in Geography and Computing to progress to geography or environmental science courses