

SUBJECT: Level 3 BTEC in Applied Science

YEAR: 12 and 13

HEAD OF DEPARTMENT: Mr Griffiths

GROUPING POLICY: Year 12 and Year 13 are taught separately

CURRICULUM INTENT

Students study the Level 3 BTEC in Applied Science over two years, with the option to leave the course with the Level 3 certificate at the end of Year 12, and the possibility of studying for the BTEC Extended Diploma in Year 13. We offer this course as it suits our learners at Rednock extremely well. The applied nature of the learning gives them excellent preparation for the world of work, especially the kinds of jobs and courses that many of our students progress on to, and the coursework element benefits those who find terminal examinations difficult. This course provides for those who want to continue their scientific studies but who do not wish to do 'pure science' or other selected degree courses.

COURSE CONTENT:

Year 12: BTEC Level 3 Certificate

This is a 30-credit qualification that leads to the award of a Level 3 Certificate qualification. It consists of two mandatory units:

Unit 1 Principles and Applications of Science I (90 Guided Learning Hours (GLHs))

- This is an externally assessed exam that is sat by students in May / June and consists of 90 marks equally split between Biology, Chemistry and Physics.

Unit 2 Practical Scientific Procedures and Techniques (90 GLHs)

- This is an internally assessed coursework unit.

Equivalent in size to 0.5 of an A Level. 2 units of which both are mandatory and 1 is external. Mandatory content (100%). External assessment (50%). The certificate in Applied Science is broadly equivalent to one AS Level.

Year 13: BTEC Level 3 Extended Certificate

This is a 60-credit qualification that consists of the three mandatory units (1, 2 and 3) and a choice of optional units to a further value of 30 credits.

Students have already completed units 1 and 2 while in Year 12: these modules have already been assessed and registered with the exam board. There will be the option of a retake offered to students for unit 1 which would be sat in the May / June exam window. The best mark would be carried forward.

This year they will be completing the following units:

Unit 3 Science Investigation Skills (120 GLHs)

- Externally assessed exam

Unit 8 Physiology of the Human Body (60 GLHs)

- Internally assessed coursework tasks.

The BTEC Level 3 extended certificate in Applied Science offers flexibility through the choice of optional units and is broadly equivalent to one A Level.

Year 13: BTEC Level 3 Foundation Diploma

Some students will have the opportunity to study for a foundation diploma in applied science. This entails completing the extended certificate early in Year 13 and then completing 2 more additional modules in Year 13. Both of these modules are internally assessed coursework tasks. Students would only be able to undertake this additional content if they have excelled in all aspects of the course in Years 12 and 13 and would not be required to retake any of the examined units from Years 12 and 13.

The level 3 foundation diploma in applied science is broadly equivalent to 1½ A levels but can be completed in a single option block.

Unit 4 Laboratory techniques and their application (90 GLHs)

- Internally assessed coursework tasks

Unit 17 Microbiology and microbiological techniques (90 GLHs)

- Internally assessed coursework tasks

What enrichment opportunities are available?

Teachers arrange visits and invite speakers into school.

How will my child's work be assessed?

Candidates will be given assignment work throughout each topic which will be in a variety of formats including videos, written assignments and presentations.

All work will be marked at either a Pass, Merit or Distinction. If enough of the assessed work is deemed to be distinction standard then a Distinction* may be awarded.

How can I support my child in this subject?

Many key scientific ideas and concepts are covered in a short period of time and it is really important that students keep up to date with classwork and homework tasks. We will be using Google Classroom software extensively throughout the duration of the course, it is essential that students have access to a computer and the internet. Many of the assignments will require the students to gather evidence of them completing a specific task so a video camera (or mobile phone with a camera) would be advantageous.

You can support in the following ways:

- Help your child organise their notes/assessments in a folder and manage their time to ensure that they do not fall behind. Prompt your child to catch up on any missed lessons.
- Have regular conversations about what they are studying in class and if you feel that your child is struggling, prompt them to seek help and support from their teachers.
- Encourage your child to learn all the key terms in Science that can be found in the glossary in the text books. Making flash cards of these would help them improve their word power which is vital for success in this subject.
- Remind your child that all notes, presentations, coursework tasks and revision materials are available on the google classroom.

How can I support my child with exams?

There is one external exam in the summer for both Year 12 and Year 13 students.

You can support your child by encouraging them to use practice exam papers, using the exam content specification provided by Pearson and shared with your child on Google Classroom. In addition to this you can help them to prepare by starting to revise early in the academic year.