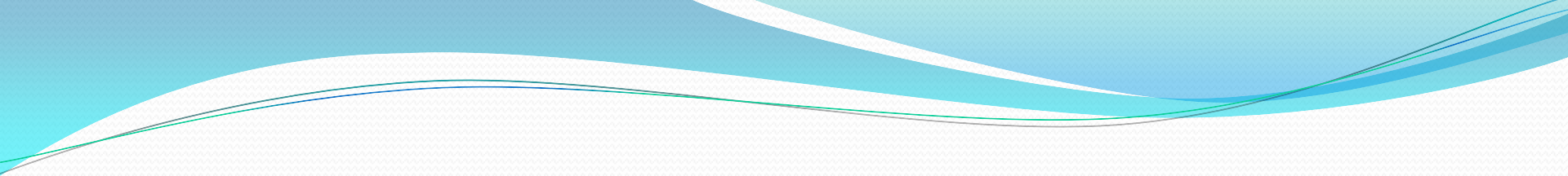


Science in the Sixth Form

Applied Science

**AQA LEVEL 3 CERTIFICATE
IN APPLIED SCIENCE**

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- 2018: waiting for the new qualification results!!
 - 2017 results: excellent
 - 2016 results: outstanding
 - 2015 results Year 12: excellent
 - 2014 results Year 12: excellent
 - 2013 results Year 12: outstanding

AQA LEVEL 3 CERTIFICATE IN APPLIED SCIENCE

- Year 12 - 33% coursework (internally assessed)
67% external assessment (two exams - including an exam with pre-release material)
- January exams **are** allowed – since it is not an A level so opportunity for resit (one resit allowed)
- And by the end of Year 13: 50% internal assessment, 50% external assessment

Units

Certificate: Year 12:

- Unit 1: Key concepts in science (Biology, Chemistry, Physics exam)
- Unit 2: Applied experimental techniques (coursework)
- Unit 3: Science in the modern world (exam with pre-release material)

Extended Certificate: Year 13:

- Unit 4: The Human Body (exam)
- Unit 5: Investigating Science (coursework)
- Unit 6: Coursework – option e.g. Medical Physics

Learners will cover topics such as:

- scientific principles associated with Biology, Chemistry and Physics
- experimental and practical techniques associated with applied science
- the roles and skills of scientists, and the public and media perception of science
- how the human body works
- scientific investigations.

Who does this qualification suit?

- Students who want a science qualification during sixth form but do not want to focus on Biology/Chemistry/Physics
- Those students who want to complement subjects such as PE/Sport studies or Engineering
- Students who do not have the entry requirements for Biology/Chemistry/Physics but will work hard on this Level 3 qualification and need science
- Students wanting to progress onto apprenticeships which require some scientific/technical skill
- Students wanting to progress onto University courses which value scientific skills
- **“This qualification is aimed at 16 to 18-year-old learners who are in full-time Level 3 education and who wish to progress to higher education and/or pursue a career in the applied science sector.”**

Entry requirements

- “This qualification is aimed at 16 to 18-year-old learners who are in full-time Level 3 education and who wish to progress to higher education and/or pursue a career in the applied science sector.”
- “to optimise their chances of success, learners will typically have four GCSEs at grade C/4 or above, including Science, Maths and English”
- Grade C = grade 4
- Sixth form entry requirement at SWA: at least 6 GCSEs at grade C or 4 and above or equivalent
- Need good literacy and numeracy (hence level 4 requirement for English and Maths).
- **Please talk to Mr McReynolds or Mrs Hoad today if you are concerned about meeting the entry requirements**

Grading

- Combination of all units (Certificate: 3 in Year 12; Extended Certificate: extra 3 in Year 13)
- Points on all units are added up
- P, M, D, D*

Have to pass ALL units – including the exams

NB: one resit chance available for each exam

Assessment dates: June 2019,
January 2020, May/June 2020

Q: If I get 4 in science and English, but a 2 in maths can I still do it?

A: Maths skills are vital in this qualification, so you would really struggle with many of the units. You would be better to make a choice of a course with less maths requirements.

Q: I'm looking at university course entry requirements and they are asking for 'science A level' – does this count?

A: It is a level 3 science qualification, but it is best to directly check with each course – you can call or email the admissions officer for the university course directly and ask them to answer your query. Different universities will have different answers. Check with them.

Q: I got 443 in triple science – so I've not completely got the entry requirement. Would you allow me to do the course?

A: We would look in detail at all of your grades – including how far away from a 4 the grade 3 was, plus your results in English and maths. It would depend on the whole picture.

Q: Do the grades in this qualification count for UCAS points?

A: Yes – as with BTECs the Certificate (Year 12) and Extended Certificate (Year 13) have UCAS points e.g. Extended Certificate pass = 16 points; Extended Certificate distinction = 48 points.

Q: I prefer only physics, can I just do units which are physics and miss out the biology parts?

A: No – there are 5 mandatory units in the two year course, we have selected the sixth unit as Medical Physics. All units need to be completed well – and all units need to be passed. A mixture of all three sciences is required.

Q: What happens if I get better results than I expected and I get the entry requirement for chemistry A level?

Choose what you would prefer doing, that you will enjoy for two years and get the best results from. We will not be offended if you end up in different classes in September! Make sure to check the entry requirements carefully for all courses.

Holiday task – Applied Science

- **Hypothesis:** Training will affect physiological measurements such as peak flow, vital capacity, resting heart rate, recovery rate and blood pressure.
- **Plan:** must include equipment list, method, risk assessment.
- Should include key terminology such as valid, repeatable, reproducible, sample size, accurate, precise, units, sphygmomanometer, peak flow meter, stopwatch, pulse rate, spirometer, risk/hazard, control measure.
- Consider who you are measuring, what you need to ask them, how you can take your measurements
- **Extend:** choose at least one of the following activities:
 - A: design a results table to present all the measurements you will take
 - B: If you were assessing asthma patients, could you explain to your patients what you were measuring with these techniques? (M1)
 - C: If you were a professional sports coach how could you use these techniques? (D1)
- We will be carrying out this investigation in the Autumn term as part of your assignments
- **Handing in: use your mybest.org.uk google drive and share with shoad@bestacademies.org.uk. Or email directly. Due date: September 10th 2018**

Marking criteria for holiday task

- P01: Demonstrate applied experimental techniques in biology
- M1: Explain the scientific principles of physiological measurements
- D1: Explain how these physiological measurements can be applied in a medical or commercial context
- P04: Understand safety procedure and risk assessment when undertaking practical work
- P10: In using experimental techniques: safely use a range of practical equipment and materials; identify hazards.

AQA LEVEL 3 CERTIFICATE IN APPLIED SCIENCE

- “This qualification is aimed at 16 to 18-year-old learners who are in full-time Level 3 education and who wish to progress to higher education and/or pursue a career in the applied science sector. As a substantial vocational qualification it provides a broad understanding of applied science to support progress to higher education. Studying this qualification will enable learners to develop their knowledge and understanding of scientific principles, as well as those scientific practical skills recognised by higher education institutions and employers to be most important. The qualification also offers learners an opportunity to develop transferable skills such as problem solving, research and communication as part of their applied learning.”

For more information:

shoad@bestacademies.org.uk

- **Course information:**
- <http://www.aqa.org.uk/subjects/science/applied-general/science>