

World class thinking. World class achieving.

St Mary's College

APPLIED SCIENCE (BTEC NATIONAL LEVEL 3)
Pre-course reading and guidance





BTEC Applied Science

WHY SHOULD I CHOOSE APPLIED SCIENCE?

- › Applied Science is an exciting course that gives you the opportunity to go into many areas within scientific study and careers. The course itself provides an opportunity for you to apply your scientific learning and knowledge to practical and industry based scenarios and it is taught by members of staff who have a wide range of expertise in delivering the subject. 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.

WHAT IS THE COURSE STRUCTURE LIKE?

- › The course is a **two year** course. It consists of **two exams** and **two coursework modules**.

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BTEC Applied Science Assessment

Unit	Topics	Type	Time
1	Principles and Applications of Science I	Exam	2
2	Practical Scientific Procedures and Techniques	Coursework	n/a
3	Science Investigation Skills	Exam	9 days (in lessons)
Option Unit	To be confirmed in September 2020	Coursework	n/a

Exam Syllabus for Applied Science:
<https://bit.ly/3aCEomn>



BTEC Applied Science Further Reading (Year 12)

Books

- Richard Dawkins: The Selfish Gene
- The Blind Watchmaker.
- Unweaving the Rainbow
- Climbing Mount Improbable
- The Ancestor's Tale
- Steve Jones: Y:The Descent of Men
- In the Blood: God, Genes and Destiny
- Almost Like a Whale: The 'Origin of Species' Updated
- The Language of the genes - Matt Ridley
- Genome: The Autobiography of a Species in 23 Chapters
- The Red Queen: Sex and the Evolution of Human Nature
- The Pleasure of Finding Things Out - Richard Feynman
- Periodic Tales - Hugh Aldersey-Williams
- The Disappearing Spoon - Sam Kean

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BTEC Applied Science Further Reading (Year 12)



Books

- › Uncle Tungsten - Oliver Sachs
- › The Shocking History of Phosphorus: A Biography of the Devil's Element - John Emsley
- › A Short History of Nearly Everything - Bill Bryson

Magazine/Journals

- › Scientific American
- › New Scientist
- › The Mole
- › Why don't penguins' feet freeze? – New Scientist
- › The Grand Design – Stephen Hawkin and Leonard Mlodinow
- › Newton – Peter Ackroyd
- › The Quantum Universe: Everything that can happen does happen – Brian Cox and Jeff Forshaw
- › Physics World (online subscription)
- › Scientific American (online subscription)
- › **New Scientist (online subscription and available from newsagents) (Top pick for all three sciences)**

Any further questions?:



Contact details of lead teachers of Applied Science:

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We also offer **A Levels** in Biology, Chemistry and Physics.

Please see the relevant pre-course reading guidance for further details.