KS4 COURSE OPTIONS – Year 11 2016-2017

Course Title	GCSE Core and GCSE Additional Science GCSE Biology, GCSE Chemistry and GCSE Physics (Triple Science)
Exam Board	AQA
Course Description	All students will be taught Biology, Chemistry and Physics by separate teachers. The depth and breadth as to which they learn these subjects depends on the route through i.e. double or triple science. **GCSE Biology** gives students the chance to gain a good understanding of human biology, organisms, evolution and the environment. The course helps put Biology in the context of students' everyday lives with topics ranging from 'Keeping healthy' to 'Humans and their environment'. The specification is based on a series of topics related to the living world and relevant to students. It is designed to help them understand how Science can be used to explain the world in which they live and the impact humans have. **GCSE Chemistry** gives students the opportunity to gain a good understanding of the nature of substances and how they react together, how Chemistry is used in business and industry and how our use of raw materials in fuels and manufacturing can affect the global and local environment. The specification is designed to help students understand how to formulate a scientific approach to understanding and explaining the world and solving problems. The specification is structured in a way that starts with the fundamental ideas in Chemistry, putting the building blocks in place. This enables students to develop an understanding of topics such as chemical structures and their properties, chemical reactions and how to analyze substances. Many of the materials considered are substances that students will come across in their daily lives like drinking water, vegetable oils and metals. **GCSE Physics** offers students the chance to gain a good understanding of the use and transfer of energy, waves, radiation and space and the application of Physics. The specification is designed to give students the tools and concepts they need to be able to construct a scientific approach to solving problems. Students will learn to ask and answer questions about the fundamental laws that govern natural phenomena. Students are likely to be engaged by the aspects of the specification that they can relate to their everyday life such as the efficiency of electrical appliances and braking distances as well as larger concepts like nuclear fission and fusion and evidence of the Big Bang. The specification integrates the principles of 'How Science Works' throughout the units and in the controlled assessment. Students completing Core and Additional Science will sit two exams in each subject and an ISA (coursework). Students will receive 2 GCSEs. Core Science: B1 C1 P1 ISA

<table>
<tr><td></td><td colspan="2">Additional Science: B2 C2 P2 ISA

This route is suitable for students of all abilities and the course encourages students to understand theoretical concepts alongside developing practical Science skills.

Students completing the Triple Science course will sit three exams in each subject and an ISA (coursework). Students will receive 3 GCSEs.

Biology: B1 B2 B3 ISA
Chemistry: C1 C2 C3 ISA
Physics: P1 P2 P3 ISA

This route is more suitable to students wishing to study medicine or an equally high level science based degree.</td></tr>
<tr><td>Course Content (Term 1,2,3 etc.)</td><td>

Term 1

Term 2

Term 3

Term 4

Term 5

Term 1</td><td>During Year 11, students completing Core and Additional Science will be embedding knowledge gained in year 9 and 10, completing all their coursework towards their GSCSs and working on exam skills.
Triple Science students will continue learning new content up until Term 4.
All students will have a lesson in the exam hall once fortnight, the focus of this session will rotate around the 3 sciences and will be designed to help support students transfer their knowledge and understanding to revision cards or notes.

<u>Students following Core and Additional Science:</u>

Additional Science ISA completed.
Embedding of Unit 1 in Biology, Chemistry and Physics.

Core Science ISA completed.
Embedding of Unit 1 in Biology, Chemistry and Physics.

Core and Additional ISA resit opportunity
Embedding of Unit 2 in Biology, Chemistry and Physics.

Embedding of Unit 2 in Biology, Chemistry and Physics.

Revision and exams begin.

<u>Students following Triple Science</u>
(please note that triple scientists get limited revision time in lessons in Year 11, due to the length of the course, so it is imperative that students are revising at home and are dedicated to the course):

Biology ISA completed
Students taught Unit 3 in Chemistry and Physics</td></tr>
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	Term 2 **Term 3 and Term 4** **Term 5**	Chemistry and Physics ISA completed Students taught Unit 3 in Biology Students taught Unit 3 in Biology, Chemistry and Physics Revision and exams begin.
Extra-Curricular Opportunities	Sixth form mentoring which runs during a tutor session prior to lessons. All students are welcome to attend.	
Useful Websites	http://www.bbc.co.uk/schools/gcsebitesize/science/aqa/ http://www.my-gcsescience.com/ http://www.docbrown.info/page20/AQAscience2S.htm Combined Science: http://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464 Separate Sciences: http://www.aqa.org.uk/subjects/science/gcse/biology-8461 http://www.aqa.org.uk/subjects/science/gcse/chemistry-8462 http://www.aqa.org.uk/subjects/science/gcse/physics-8463	
Important Information	All students will be taught the GCSE course by a subject specialist i.e. they will have a Biology, Chemistry and Physics teacher. Students can study A-level Biology, Chemistry, Physics or BTEC Science having completed Core and Additional Science at GCSE as well as those who have completed Triple Science. It is the grade achieved, not the course, that will show their ability within the subject and therefore determine their success at accessing a course post-16.	
Provision For Most Able	Most able students will complete Triple Science course.	

Assessment	**Exams 2017** Tuesday 16th May - B1 Thursday 18th May - C1 Wednesday 24th May - P1 Friday 9th June - B2 and B3 Wednesday 14th June - C2 and C3 Friday 16th June - P2 and P3