Combined Science

## Class of 2018

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| Exam board information:Cambridge international GCSE in Combined Science 0653 |

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| Course content:The Combined Science GCSE gives students a basic grounding in all three Science Disciplines, Biology, Chemistry and Physics and incorporated practicals skills into each of these subjects. The content of the syllabus is related to real world context to show students how Science impacts on our everyday lives. |
| BiologyB1. Characteristics of living organisms B2. Cells B3. Enzymes B4. Nutrition B5. Transportation B6. Respiration B7. Co-ordination and response B8. Reproduction B9. Energy flow in ecosystems B10. Human influences on the ecosystem | ChemistryC1. The particulate nature of matter C2. Experimental techniques C3. Atoms, elements and compounds C4. Stoichiometry C5. Electricity and chemistry C6. Energy changes in chemical reactions C7. Chemical reactions C8. Acids, bases and salts C9. The Periodic Table C10. Metals C11. Air and water C12. Organic chemistry | PhysicsP1. Motion P2. Matter and forces P3. Energy, work and power P4. Simple kinetic molecular model of matter P5. Matter and thermal properties P6. Transfer of thermal energy P7. Waves P8. Light P9. Electromagnetic spectrum P10. Sound P11. Electricity P12. Electric circuits |

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| Skills that will be developed:The Combined science syllabus enables learners to:* Better understand the technological world, with an informed interest in scientific matters
* Recognise the usefulness (and limitations) of scientific method, and how to apply this to other disciplines and in everyday life
* Develop an interest in, and care for, the environment
* Better understand the influence and limitations placed on scientific study by society, economy, technology, ethics, the community and the environment
* Develop an understanding of the scientific skills essential for both further study and everyday life.
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| How the course will be assessed:All Candidates will be assessed in 3 exams:* A multiple choice paper lasting 45 minutes, consisting of 40 marks which counts for 30% of the course.
* A written paper consisting of short answers and longer structured questions lasting 1 hour and 15 minutes. This counts for 50% of the overall grade.
* An Alternative to practical exam, which is marked out of 60 and counts for 20% of the overall grade
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| To be successful:Students must display several qualities: * An excellent work ethic, both in lessons and out of school ensuring classwork and homework
* Resilience when encountering difficult challenges, and not giving up when problems occur
* Good literacy and numeracy skills.
* An ability to work with others.
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| Onward pathways:Combined Science allows students to progress onto the following courses beyond KS4: * Applied Science GCE Applied A-level
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| Further information:The Website for the Combined Science qualification can be found here:<http://www.cie.org.uk/programmes-and-qualifications/cambridge-igcse-science-combined-0653/> Or contact Mr Dyson at St Ninian’s High school by email:nickdyson@snhs.sch.im  |