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. | | |
| Biology B1. 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 | Chemistry C1. 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 | Physics P1. 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](mailto:nickdyson@snhs.sch.im) |