Science

Marshland High School Specialist Science College





KS4 Curriculum Overview (Year 9, 10 and 11)

Year 9

In Year 9 the most able students begin GCSE work to prepare them for the increased study needed for Triple Science. Whilst students who will be entered for Combined Science (A Double award GCSE) study a Single Award Science Entry Level Certificate, which provides a secure foundation from which to build GCSE knowledge and awards them with a qualification at the end of Year 9.

Year 10 and 11

In Year 10 and 11 all students study the AQA Science Trilogy (Double award) or three Separate Sciences (Triple award), depending on their ability. Students following both pathways attend 100 minutes each week of Biology, Chemistry and Physics and are taught by 3 different specialist teachers. During these lessons, they learn the content and practical skills required to succeed in their final exams.



Current Year 11 students are the first year

group to follow the reformed 9-1 Science GCSE. The AQA Combined Science course covers a full range of Science concepts giving students a breadth of scientific skill and knowledge, students following the Separate Science route will cover the same breadth of topics in greater detail and to a higher level. The topics students follow are as follows; Biology: Cell Biology, Organisation, Infection and Response, Bioenergetics, Homeostasis and Response, Inheritance, Variation, Evolution and Ecology; Chemistry: Atoms and the Periodic table, Bonding, Quantitative Chemistry, Chemical Reactions, Rates of Reaction, Organic Chemistry, Analysis and Earth; Physics: Energy, Electricity, Matter, Atomic structure, Forces, Waves, Magnetism and Electromagnetism.

All topics are assessed with a one hour long test with questions ranging from Grade 1-9, the tests will be marked and students will have time to reflect on their learning. At points throughout the year students will also complete mock exams provided by AQA to allow overall progress to be tracked.

The course assessment structure is 100% exam based and these will be taken at the end of Year 11. The course also includes a number of required practicals which will be completed by students during lesson time, knowledge acquired during these practicals will be tested in the final exams along with subject content.