Key Stage 4 Subject Overview: GCSE Additional Science

Course Information: This course offers you the chance to gain a good understanding of aspects of Biology, Chemistry and Physics.

Course name: **ADDITIONAL SCIENCE** Exam Board: AQA Subject Code: 4408

Course Structure:

Unit title	Units B1 and 2	Unit P1 and 2	Unit C 1 and 2	Unit 4
Description	BIOLOGY 1 AND 2	PHYSICS 1 AND 2	CHEMISTRY 1 AND 2	INVESTIGATIVE SKILLS ASSESSMENT
Course weighting	25% (written paper 1 hour each) This paper includes :structured and closed questions. At least one question assessing Quality of Written Communication (QWC) in a science context.	25% (written paper 1 hour each) This paper includes :structured and closed questions. At least one question assessing Quality of Written Communication (QWC) in a science context.	25% (written paper 1 hour each) This paper includes :structured and closed questions. At least one question assessing Quality of Written Communication (QWC) in a science context.	25% each (two written assessments plus one or two lessons of practical work and data processing). **FOR CORE AND ADDITIONAL**

Key Stage 4 Timeline

Year 10			Year 11		
Autumn	Spring	Summer	Autumn	Spring	Summer
PHYSICS 1 Energy transfer by heating, using energy, electrical energy and generating electricity, waves and electromagnetic waves.	**CHEMISTRY 1** Fundamentals, Rocks and buildings Metals, Crude oil, products from oil, plant oils and changing planet.	**BIOLOGY 1** Keeping healthy, diet and exercise, coordination and control, medicine and drugs, adaptation for survival, energy and Biomass, variation, reproduction and new technology. **CONTROLLED ASSESSMENT FOR CORE SCIENCE (ISA)**	**PHYSICS 2** Motion, Forces Work, energy, momentum, current electricity, Mains electricity, radioactivity and energy from the nucleus. **CONTROLLED ASSESSMENT (ISA)**	**BIOLOGY 2** Cells, tissues and organs, Organisms and the Environment, Enzymes, Energy from Respiration. Simple inheritance, in animals and plants , Old and new Species **CHEMISTRY 2** Structure and Bonding , Structure and properties, How much,	**CHEMISTRY 2** Rates and energy, Properties, Salts and electrolysis. **EXAMS**

A*	A	C
Apply content knowledge to a range of events. Analyse graphs to make conclusion . Evaluate arguments and justify own opinion based on scientific points made. Rearrange equations to perform calculations and use answers from calculations to make recommendations . Write symbol and half equations . Make recommendations based on scientific evidence . link ideas from different areas to provide explanations. Argue ethical issues and make valid choices based on arguments and verify the value of certain evidence.	Applying knowledge from each topic to everyday problems . Plan experiments to investigate scientific ideas Compare results and arguments. Interpret models and show how scientific ideas have changed over time. Rearrange equations to perform calculations. Write balanced chemical equations. Distinguish between evidence and opinions	In each topic be able to: Explain all the concepts above. Carry out investigations to investigate hypothesis. Interpret data shown on graphs and tables. Carry out calculations using data sheet . Write word equations. Make and interpret scientific models. Apply concrete ideas to less familiar situations.