**Applied Science KS5 Overview** ***2021-2022***

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|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| Year 12 | **Unit 1:**- Chemical structures of elements and compounds- Reactions in chemical and biological systems- Cell organisation and structures | **Unit 1:**- Principles of carbon chemistry- The importance of inorganic chemistry in living systems- Structures, properties and uses of materials | **Unit 1 exam.****Unit 2:**- The importance of health and safety and quality systems toindustry- Separate, identify and quantify substancespresent in a mixture | **Unit 2:**- Determine the concentration of an acid or base using titration- Examine and record features of biological samples | **Unit 2:**- Identify cations and anions in samples- Aseptic technique | **Unit 1 and 2 exams****Year 13 Prep:**- Lab visit- Development of titrations |
|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| Year 13 | **Unit 6**- Hazards in the laboratory- Risk Assessment**Unit 21:**- Hazard Labelling Regulations | **Unit 6:**- Laboratory Design**Unit 18:**- Classify and identify microorganisms**Unit 21:**- Test Method Development | **Unit 1 and 2 resit exams****Unit 18:**- Microbiology in the farming environment**Unit 21:**- Performing Titrations | **Unit 18**- Use microbiology in food production.**Unit 21:**- Performing Extraction, Separation & Thin LayerChromatography | **Unit 1 and 2 resit exams****Unit 18:**- Action of antimicrobials on microorganisms | **Course end** |