Applied Science Curriculum Overview

OUTCOMES VALUES CHOICES

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
YEAR 12	**Unit 1 – Principles and Applications of Science I** - LA A-Periodicity and properties of elements - Structure and bonding in applications in science - Production and uses of substances in relation to properties **Unit 1 – Principles and Applications of Science I** - LA B-Structure and functions of cells and tissues - Cell structure and function - Cell Specialism - Tissue structure and function **Unit 1 – Principles and Applications of Science I** - LA C-Waves in communication - Working with waves - Waves in communication - Use of electromagnetic waves in communication		**Unit 2 – Practical Scientific Procedures and Techniques - Concentrate on keeping up your standards** - LA A – Undertake titration and colorimetry to determine concentration of solutions - Calibration of laboratory equipment to be used throughout the assignment - Preparation and standardisation of solutions using titration - Using colorimetry to determine an unknown concentration **Unit 2 – Practical Scientific Procedures and Techniques - Keeping up the standards** - LA B – Undertake calorimetry to study cooling curves - Calibration of thermometers and compare different examples to help choose appropriate equipment - Collect data to create a cooling curve **Unit 2 – Practical Scientific Procedures and Techniques - Separate to identify** - LA C – Undertake chromatographic techniques to identify components in mixtures - Chromatographic techniques - Application of chromatography - Interpretation of a chromatogram		**Unit 2 – Practical Scientific Procedures and Techniques – How am I doing?** - LA D - Review personal development of scientific skills for laboratory work - Reflection on personal responsibility - Evaluating your interpersonal skills - Understanding professional practice
YEAR 13	**Unit 3- Science investigation skills** - LA A – Planning a scientific investigation - LA B – Data collection, processing and analysis/interpretation - LAC – Drawing conclusions and evaluation - LA D – Enzymes in action - LA F – Plants and their environment **Unit 3- Science Investigation skills** - LA A – Planning a scientific investigation - LA B – Data collection, processing and analysis/interpretation - LAC – Drawing conclusions and evaluation - LA E – Diffusion of molecules - LA G – Energy content of fuels **Unit 3- Science investigation skills** - LA A – Planning a scientific investigation - LA B – Data collection, processing and analysis/interpretation - LAC – Drawing conclusions and evaluation - LA H – Electrical Circuits		**Unit 8 – Physiology of Human Body System - Musculoskeletal disorders** - LA A – Understand the impact of disorders of the musculoskeletal system and their associated corrective treatments - Structure of the musculoskeletal systems - Function of the musculoskeletal system - Health matters and treatments related to the musculoskeletal system **Unit 8 – Physiology of Human Body System - Impact of lymphatic disorder and associated treatments.** - LA B – Understand the impact of disorders on the physiology of the lymphatic system and the associated corrective treatments - Structure of the lymphatic system - Function of the lymphatic system - Health matters and treatments related to the lymphatic system **Unit 8 – Physiology of Human Body System - Nutrition and health** - LA C – Explore the physiology of the digestive system and the use of corrective treatments for dietary-related disease - Structure of the digestive system - Function of the digestive system - Health matters and treatments related to the digestive system		