

Curricular Area: Science		Subject: Chemistry	
National 4 (SCQF Level 4)	National 5 (SCQF Level 5)	Higher (SCQF Level 6)	Advanced Higher (SCQF L7)
Course Content	Course Content	Course Content	Course Content
Chemical Changes and Structure - chemical reactions, rates of reaction, energy changes of chemical reaction, acids and bases, chemical equations, research atomic structure and bonding related to properties of materials. Nature's Chemistry - fossil fuels, carbohydrates and consumer products, find out how chemists use plants in the development of everyday products. Chemistry in Society - chemical reactions, properties and applications of metal and alloys, properties and applications of plastics and new materials, use of fertilisers, the formation of elements.	Chemical changes and structure - rates of reaction, atomic structure and bonding related to properties of materials, formulae and reacting quantities, acids and bases. Nature's chemistry - the homologous series, everyday consumer products, energy from fuels. Chemistry in society - metals and plastics, fertilisers, nuclear chemistry, chemical analysis.	Chemical changes and structure - Periodicity; structure and bonding; oxidising and reducing agents. Nature's chemistry - Systematic carbon chemistry; alcohols; carboxylic acids; esters; fats and oils; soaps; detergents and emulsions; proteins; oxidation of food; fragrances; skin care. Chemistry in society - Getting the most from reactants; controlling the rate; chemical energy; equilibria; chemical analysis. Researching chemistry - Common chemical apparatus; general practical techniques; reporting experimental work.	Inorganic Chemistry - electromagnetic radiation and atomic spectra, atomic orbitals, electronic configurations and the periodic table, transition metals. Physical Chemistry - chemical equilibrium, reaction feasibility, kinetics. Organic chemistry and instrumental analysis - molecular orbitals, synthesis, stereochemistry, experimental determination of structure, pharmaceutical chemistry. Researching chemistry - common chemical apparatus, skills involved in experimental work, stoichiometric calculations, gravimetric analysis, volumetric analysis, practical skills and techniques.
How will the course be assessed?	How will the course be assessed?	How will the course be assessed?	How will the course be assessed?
Your work will be assessed by your teacher on an ongoing basis throughout the course. Items of work might include: - practical work - such as practical experiments - written work - research assignments and reports - projects - class-based exams. You must pass all the units including the practical unit to gain the course qualification.	The course assessment consists of two components totalling 120 marks: - Component 1: question paper – worth 100 marks (section 1 is worth 25 marks, section 2 is worth 75 marks) - Component 2: assignment – worth 20 marks.	The course assessment has three components totalling 140 marks: - Component 1: question paper 1 (multiple choice) – worth 25 marks - Component 2: question paper 2 – worth 95 marks - Component 3: assignment – worth 20 marks.	The course assessment consists of two components totalling 135 marks: - Component 1 - Question paper (110 marks) - Component 2 - Project (25 marks)
Career Pathways			
There are many career opportunities connected with Chemistry, including brewery worker, chemical engineer, environmental scientist, crime scene examiner, dentist, doctor, forensic scientist, marine biologist, paramedic, pharmacologist, veterinary surgeon.			