Sai Kung Sung Tsun Catholic School (Secondary Section)
F.5 Chemistry TEACHING SYLLABUS

Topic	Experiment/ Activity
1. Microscopic World II 1.1 Shapes of molecules 1.2 Bond polarity and intermolecular forces	1. Building models of molecules 2. Testing liquids to find out if their molecules are polar 3. Investigating the temperature changes caused by the evaporation of liquids with different strength of intermolecular attractions
2. Fossil Fuels and Carbon Compounds 2.1 Fossil fuels 2.2 Homologous series, structural formulae and naming of carbon compounds 2.3 Alkanes and alkenes 2.4 Addition polymers	1. Investigating important reactions of alkanes 2. Cracking of medicinal paraffin and testing the gaseous product 3. Investigating the chemical properties of an alkene
Revision	
First term examination	
3. Chemistry of Carbon Compounds 3.1 An introduction to the chemistry of carbon compounds 3.2 Isomerism 3.3 Typical reactions of selected funcitonal groups 3.4 Synthesis of carbon compounds 3.5 Important organic substances	1. Oxidizing ethanol to ethanoic acid and testing the ethanoic acid and produced 2. Studying the reaction between ethanol and ethanoic acid 3. Preparing and purifying 2-chloro-2-methylpropane 4. Preparing a soap and testing its properties
Uniform Test	
4. Chemical Reactions and Energy 4.1 Energy changes in chemical reactions 4.2 The enthalpy change and internal energy change of a system during a reaction 4.3 Measuring enthalpy changes 4.4 Hess's Law 4.5 Use Hess's Law to determine enthalpy changes	1. Finding pairs of chemicals that may be used to make heat-packs and cold-packs 2. Determining the enthalpy changes of neutralization 3. Determining the strength of the hydrogen bond between ethanol molecules. 4. Determining the enthalpy changes of combustion of some alcohols 5. Determining the enthalpy change of formation of the magnesium oxide 6. Determining the enthalpy change of thermal decomposition of potassium hydrogencarbonate
Revision	
Second term examination	

F.5 CHEMISTRY ASSESSMENT SYSTEM：

Term Result (100%) = Term exam (50%) + Course work(50%)
Course work (100%) = Uniform test /Term Tests/Quizzes(50%) + homework(40%) + learning attitude (10%)
Annual Result (100%) = 1st Term Result (50%) + 2nd Term Result (50%)