Chemistry

St. Paul's College
Department of Chemistry

New Senior Secondary Curriculum - Chemistry

Introduction

Chemistry deals with the composition, structures, and properties of matter, the interactions between different types of matter, and the relationship between matter and energy.

Through the learning of chemistry, it is possible to acquire relevant conceptual and procedural knowledge. Besides, a study of chemistry also helps to develop understanding and appreciation of developments in *engineering*, *medicine*, and other related scientific and technological fields.

The aims of the NSS Chemistry Curriculum are to provide chemistry-related learning experiences for students, so that they can develop interest in chemistry; to apply knowledge of chemistry; and to communicate ideas of and views on science-related issues using the language of chemistry.

The NSS Chemistry Curriculum is divided into three parts: the compulsory part where 12 topics would be covered; the elective part where 2 out of 3 topics would be selected and finally the investigative study. The topics Industrial Chemistry and Analytical Chemistry would be offered in the elective part.

The SBA Tasks occupy 20% of the public assessment and they are mostly practical related. They include some basic chemical analysis, some experiments other than chemical analysis, the investigative study and some non-practical related assignments

Topics to cover

Topics covered	Content	Teaching time
Topic 1	Planet Earth*	8 hours
Topic 2	Microscopic world I*	24 hours
Topic 3	Metals*	22 hours
Topic 4	Acids and bases*	27 hours
Topic 5	Fossil fuels and carbon compounds*	20 hours
Topic 6	Microscopic world II*	8 hours
Topic 7	Redox reactions, chemical cells and electrolysis*	26 hours
Topic 8	Chemical reactions and energy*	9 hours
Topic 9	Rate of reaction	8 hours
Topic 10	Chemical Equilibrium	10 hours
Topic 11	Chemistry of carbon compounds	27 hours
Topic 12	Patterns in the chemical world	9 hours
Topic 13	Industrial chemistry	26 hours
Topic 15	Analytical chemistry	26 hours
	Investigative study in chemistry	20 hours

NSS Combined Science (Chemistry Part)

Topics covered	Content	Teaching time
Topic 1	Planet Earth*	8 hours
Topic 2	Microscopic world I*	24 hours
Topic 3	Metals*	22 hours
Topic 4	Acids and bases*	27 hours
Topic 5	Fossil fuels and carbon compounds*	20 hours
Topic 6	Microscopic world II*	8 hours
Topic 7	Redox reactions, chemical cells and electrolysis*	26 hours
Topic 8	Chemical reactions and energy*	9 hours