



Enseignement secondaire		
Classes internationales		
	Régime anglophone	
Chimie		
Programme		
2IB et 1IB		

Leçons hebdomadaires : 3 at Standard Level (SL) and 5 at Higher Level (HL) 1 practical lesson in 2IB
Langue véhiculaire : anglais
Nombre minimal de devoirs par semestre : 2 at SL and 3 at HL

Remarque: La présentation du sujet, l'approche de l'enseignement et le programme sont ceux donnés par IBO (International Baccalaureate Organization) en 2024.

Nature of the subject

Chemistry is an experimental science that combines academic study with the acquisition of practical and investigational skills. It is called the central science, as chemical principles underpin both the physical environment in which we live and all biological systems. Apart from being a subject worthy of study in its own right, chemistry is a prerequisite for many other courses in higher education, such as medicine, biological science and environmental science, and serves as useful preparation for employment. The Diploma Program chemistry course includes the essential principles of the subject but also, through selection of options, allows teachers some flexibility to tailor the course to meet the needs of their students. The course is available at standard level (SL) and at high level (HL).

Teaching approach

There are a variety of approaches to the teaching of chemistry. By its very nature, chemistry lends itself to an experimental approach, and it is expected that this will be reflected throughout the course. The order in which the syllabus is arranged is not the order in which it must be taught, and it is up to individual teachers to decide on an arrangement that suits their circumstances. Option material may be taught within the core.



Syllabus overview

Structure	Reactivity
<p>Structure 1. Models of the particulate nature of matter</p> <p>Structure 1.1—Introduction to the particulate nature of matter Structure 1.2—The nuclear atom Structure 1.3—Electron configurations Structure 1.4—Counting particles by mass: The mole Structure 1.5—Ideal gases Reactivity 1.4—Entropy and spontaneity</p>	<p>Reactivity 1. What drives chemical reactions?</p> <p>Reactivity 1.1—Measuring enthalpy changes Reactivity 1.2—Energy cycles in reactions Reactivity 1.3—Energy from fuels</p>
<p>Structure 2. Models of bonding and structure</p> <p>Structure 2.1—The ionic model Structure 2.2—The covalent model Structure 2.3—The metallic model Structure 2.4—From models to materials</p>	<p>Reactivity 2. How much, how fast and how far?</p> <p>Reactivity 2.1—How much? The amount of chemical change Reactivity 2.2—How fast? The rate of chemical change Reactivity 2.3—How far? The extent of chemical change</p>
<p>Structure 3. Classification of matter</p> <p>Structure 3.1—The periodic table: Classification of elements Structure 3.2—Functional groups: Classification of organic compounds</p>	<p>Reactivity 3. What are the mechanisms of chemical change?</p> <p>Reactivity 3.1—Proton transfer reactions Reactivity 3.2—Electron transfer reactions Reactivity 3.3—Electron sharing reactions Reactivity 3.4—Electron-pair sharing reactions</p>

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