

Teacher name: Mary Tsotsis

Subject: Chemistry IB Higher Level, Year 1

Number of periods per week: 5

Class: Chemistry IB 11 HL

Course description - aims and skills- retake policy

Chemistry is often called the central science, as chemical principles underpin both the physical environment in which we live and all biological systems. Along with being incorporated into our everyday lives, chemistry integrates multiple areas of science to solve a broad range of global issues. 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.

The study of IB Chemistry combines academic study with the acquisition of practical and investigational skills. The students will not only learn the language of chemistry but will also develop critical thinking, and practical laboratory skills that will aid them in their future studies. They will demonstrate knowledge and understanding of scientific concepts and methodologies and how they relate to everyday life and world issues. They will apply facts, concepts and techniques for communicating scientific information. In addition, each student will design, carry out and evaluate an individual investigation, with the goal to demonstrate and to further develop their research, experimental, and critical thinking skills.

Students with an unsatisfactory score on a test, are welcome to retake the test to improve their knowledge, skills, confidence and grade, if they complete additional work required.

Timeline:

August-September: Measurement in IB Science, Models of the particulate nature of matter

October-November: Models of Bonding and Structure

November-December: Classification of Matter

January-February: What drives chemical reactions?

March-May: What are the mechanisms of chemical change? Proton transfer reactions