

COURSE TITLE: IB Chemistry 1

Level of Difficulty	Estimated Homework	Prerequisites
Very Difficult	60-90 minutes	District: <u>B- or better in BioH and Chem H, B- or better in Algebra 2</u> Department Suggestion: B- or better in Honors Chemistry and Honors Biology Math Analysis (at minimum concurrently)

Course Description:

IB Chemistry 1 is the first year in a two-year higher level (HL) course in chemistry. IB Chemistry 1 is required to continue into year 2 as there are a required number of lab hours mandated by IB.

In IB Chemistry 1, there is a heavy emphasis on independent thinking, student investigation and inquiry skills, research, analysis, and application. Students will communicate their ability to apply, critique and revise their findings in several ways such as professional-level visual, written and oral communications. Several independent, in-depth lab reports will be submitted.

In IB Chemistry 1, students will revisit concepts learned in Honors Chemistry but will explore these concepts at a much greater level of depth. This course is designed to meet the up-to-date curriculum requirements of the International Baccalaureate Diploma Program. This course incorporates recent scientific thinking and emphasizes opportunities for research and discovery as well as personal experience in the use of the scientific method. Students will further their content knowledge of chemistry in preparation for IB Chemistry HL 2.

Grading:

Regular homework assignments are intended for practice of concepts learned, and therefore will be graded based on completion and will make up a small percentage of the overall grade. While homework assignments are an important part of the learning process, the primary means of assessing understanding of concepts will be through lab reports, quizzes and tests, which together constitute the majority of the overall grade.

Syllabus:

This will be distributed by the teacher at the start of each school year. Units of study will include measurement and data processing, stoichiometric relationships, atomic structure, periodicity, chemical bonding and structure, energetics/thermochemistry, chemical kinetics, equilibrium and acids and bases.

Supplemental Information:

Students can only take the IB Chemistry exam after both IB Chemistry 1 and IB Chemistry 2.

Homework Estimate: This is a general guideline for planning and scheduling purposes. A student's ability level may affect actual preparation time needed.