

EXPERIMENTAL SCIENCES

IB Course Content

Biology: Two-year course sequence (High Level course)

Chemistry, Physics, Environmental Systems and Societies:

- One-year Standard Level courses
- Prerequisite of Foundations of Chemistry for Chemistry and Environmental Systems. Can be taken concurrently for Environmental Systems.
- Prerequisite of Foundations of Physics for Physics

The hands-on approach emphasizes science as a process. Students will be expected to design and carry out experimental procedures, as well as apply theoretical principles and analyze results. Students also develop an awareness of moral and ethical issues, and a sense of social responsibility is fostered by examining local and global issues.

IB Course Assessments

A portfolio containing a series of laboratory findings and analysis. A student's best work is chosen for submission. Biology requires a minimum of 60 hours lab work, and Chemistry/Physics require 40 hours. The hour requirement is greater for Biology because it is a HL course.

"Group 4" Project: a short investigation into an "umbrella" problem, carried out by students in all the experimental sciences, working, in part, in groups of 3 or 4 (from one subject area) to design and test a hypothesis on their own. It stresses reflection, action and evaluation. They produce a report and share the results with teachers and other IB students in a poster session. With this project, students earn 15 hours toward the 40 or 60 hours required for that class for IB.

Lab work is graded internally, and moderated externally by the IBO to ensure consistent grading by all instructors.

IB Examination

Paper 1: Multiple-choice questions

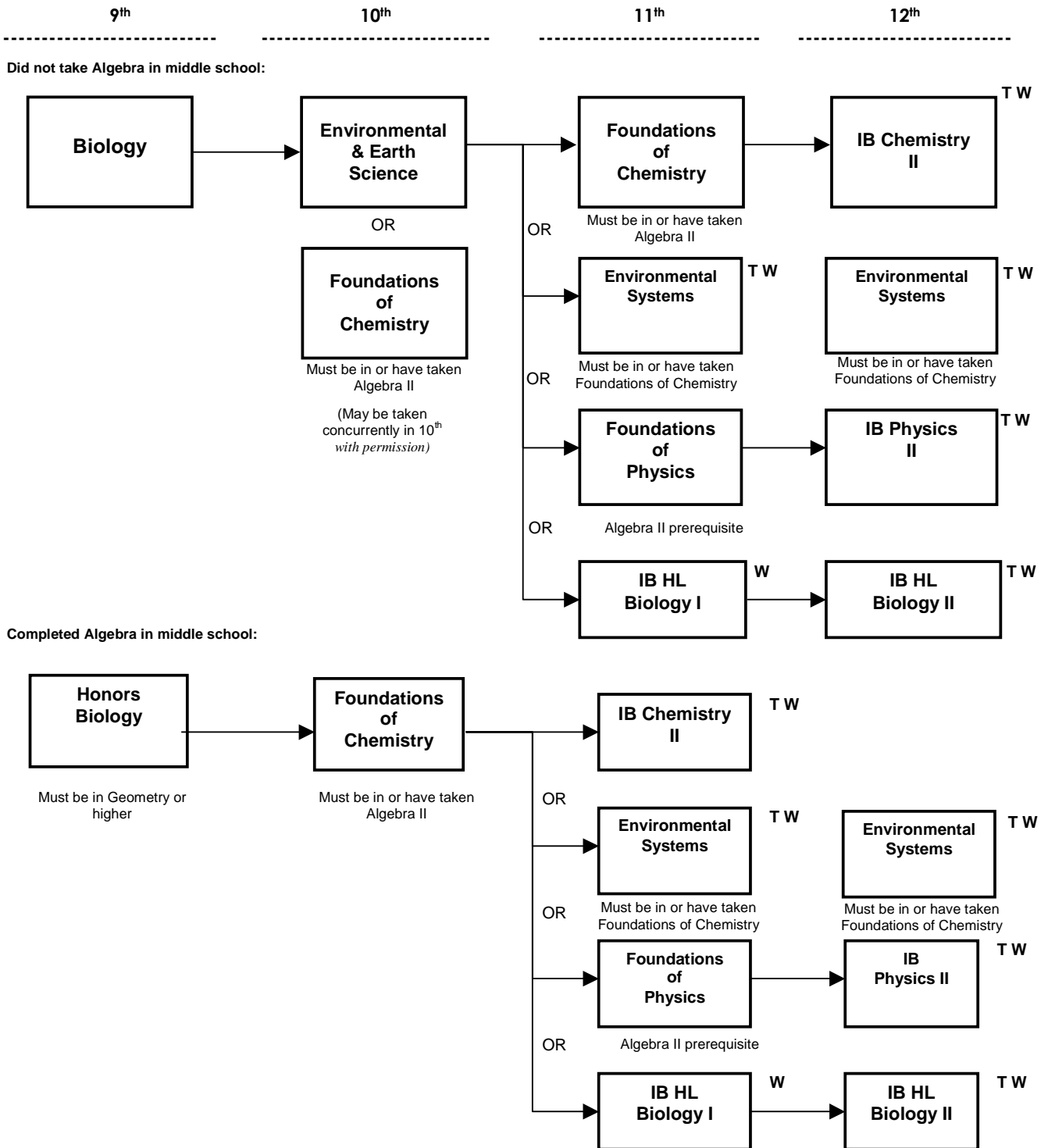
Paper 2: Questions dealing with presented data, short answer questions, and extended response questions.

Paper 3: Extended response questions, regarding Options topics students have chosen to study over the past year. The options are determined by the teachers, based on their personal expertise and student interest.

These are externally assessed by the IBO.

EXPERIMENTAL SCIENCES

The science curriculum offers four options:
Biology at the High Level, and Chemistry, Physics and Environmental Systems at the Standard Level.



SPECIAL NOTES:

- All students should consider taking Chemistry and/or Physics after finishing their IB science requirement, or concurrently as a senior (if haven't taken).
- Students who are very interested in science may also choose it as their 6th subject.
- It is also an option to take AP Biology or AP Environmental Systems as a senior after completion of the IB Chemistry or Physics sequence.

Notes: All course are 1.0 credit (full-year) unless otherwise specified.
 "W" refers to weighted courses.
 "T" is the course after which the IB exam is given.