

PURE SCIENCES

(a) What is going to be taught?

(i) Pure Chemistry (compulsory)

The syllabus is available online:

https://www.seab.gov.sg/docs/default-source/national-examinations/syllabus/olevel/2022syllabus/6092_y22_sy.pdf

The subject places emphasis on the application of scientific concepts and principles. Students learn about substances, chemical reactions and abstract molecular structures. They learn skills such as chemical analysis and will also be required to apply problem-solving skills.

(ii) Pure Physics (compulsory)

The syllabus is available online:

https://www.seab.gov.sg/docs/default-source/national-examinations/syllabus/olevel/2022syllabus/6091_y22_sy.pdf

The subject provides students with a coherent understanding of energy, matter and their relationships. It focuses on investigating natural phenomena and then applying patterns, models, principles, theories and laws to explain the physical behaviour of the universe.

Through the learning of Pure Sciences and practical sessions, students will develop skills that will be of long-term value such as accuracy and precision, integrity, enquiry, initiative and inventiveness.

(iii) Pure Biology (only applicable to students eligible for triple sciences)

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Besides the study of plants and the human anatomy, Pure Biology stimulates interest in, and develops care for, the local and global environment. It also provides awareness that the applications of science may be both beneficial and detrimental to the individual, the community and the environment.

(b) What is expected of the student in learning the subject?

- An interest and aptitude towards pure Biology/ Chemistry/ Physics
- Hard work and perseverance;
- Positive attitude;
- Attendance and punctuality in submission of assignments.
- Skills in observation, data analysis, handling information and problem-solving
- Ability to gather experimental results, plan for investigations, evaluate methods and offer improvements are important science practical skills.
- Participate actively in class discussions and practical sessions and seek help **immediately** when in doubt.

(c) Assessment

- Tests
- Semestral Exams (including practical exam at Sec 4)

(e) How can parents/guardians assist and support?

- Ensure the child completes his/ her assignments and revises regularly;
- Encourage the child to apply his/ her learning.

(f) How is the subject useful or relevant for the future?

- Pure Sciences allow your child to adapt to the study of Chemistry/ Biology/ Physics as a H2 subject in a Pre-U course.
- Good grades (A1 or A2) for Chemistry are an added advantage for polytechnic courses such as Food Science, Biomedical Science, Biotechnology, Chemical Engineering, Environmental Science and Pharmacy Science.

Note: Biology is not a pre-requisite subject for entry into Life Sciences courses in Polytechnic education. For students interested in Medicine/ Pharmacy/ Dentistry/ other medical fields, Biology is not a prerequisite.