

Science

Biology

Biology explores the diversity of life from a molecular to a biological systems level. The course examines the interactions between living things and the environments in which they live. It is a fundamental discipline that focuses on personal and public health and sustainability issues and promotes an appreciation for the diversity of life on the Earth and its habitats.

Who should choose to study Biology?

Students who are likely to succeed in Biology will have demonstrated, at least, an overall sound achievement level in their Stage 5 Science course and have acquired at least average development of literacy skills. Studying the HSC Biology course may lead to a broad range of tertiary study and career options in scientific, medical and engineering fields. The course provides the foundational knowledge and skills required to study biology after completing school.

Course Content

The Year 11 and Year 12 courses each comprise four modules.

Year 11

- Module 1: Cells as the Basis of Life
- Module 2: Organisation of Living Things
- Module 3: Biological Diversity
- Module 4: Ecosystem Dynamics

Year 12

- Module 5: Heredity
- Module 6: Genetic Change
- Module 7: Infectious Diseases
- Module 8: Non-Infectious Disease and Disorders

Biology uses Working Scientifically processes to develop scientific investigative skills. It focuses on developing problem-solving and critical thinking skills in order to understand the natural environment. Students are provided with opportunities to design and conduct biological investigations both individually and collaboratively. A minimum of 15 hours of in-class time is allocated to **depth studies** in both Year 11 and Year 12. The Biology course maintains a practical emphasis in the delivery of the course content and engages with the technologies that assist in investigating current and future biological applications.

See the NESA Biology syllabus on the website below for more information.

<https://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/stage-6-learning-areas/stage-6-science/biology-2017>