



Biology

What is Biology?

Biology is the scientific study of living systems, from macromolecules to the biosphere. The science is continually changing and an understanding of Biology can contribute to a clearer understanding of the place and responsibilities of human beings on this planet.

Why study Biology?

Biology helps people to develop an appreciation and understanding of the living world, and to understand the importance of using the resources of the environment in a sustainable way.

The ideas and theories of biology are applied in many other disciplines (e.g. biochemistry, pharmacology, sports science). Biology provides useful background knowledge for many occupations in fields such as agriculture, conservation, forestry, horticulture, medicine, pollution control, veterinary science, and viticulture.

Course content of Biology

This is a full year course. There are four themes in the course:

- Macromolecules
- Cells
- Organisms
- Ecosystems

Assessment Components

Assessment in Biology consists of the following components, weighted as shown:

School Based Component 70%

- Investigations Folio (40%) – This component will include practical investigations and issues investigations, and is externally moderated.
- Skills and Applications Tasks (30%) – This component will include topic tests, and is externally moderated.

Externally Moderated Component: 30%

- Examination

Learning Requirements of the Course

At the end of the program in Stage 2 Biology, students should be able to:

1. Identify and formulate questions, hypotheses, concepts, and purposes that guide biological investigations
2. Design and conduct individual and collaborative biological investigations
3. Manipulate apparatus and use technological tools and numeracy skills to obtain, represent, analyse, interpret, and evaluate data and observations from biological investigations
4. Select and critically evaluate biological evidence from different sources and present informed conclusions and personal views on social, ethical, and environmental issues
5. Communicate their knowledge and understanding of biological concepts using appropriate biological terms and conventions
6. Demonstrate and apply biological knowledge and understanding of concepts and interrelationships to a range of contexts and problems, including by presenting alternative explanations.

Biology continued

Future Pathways in Biology

Biology provides a pathway to further study in tertiary institutions, including the following nationally accredited training packages:

- Amenity Horticulture
- Animal Care and Management
- Food Processing Industry
- Laboratory Operations
- Maritime
- Rural Production

Biology also provides a pathway to a number of university courses, and associated careers in areas such as:

- Marine Science
- Molecule Biology
- Occupational Therapy or Nursing
- Science
- Winemaking

Required Text(s) for Biology

Biology Key Ideas -Textbook SACE 2 (2nd ed) Crierie & Greig

Biology Essentials - Workbook SACE 2. Crierie & Grieg

Biology Key Ideas - Practical Manual SACE 2 (2011 ed) Crierie & Greig

Biology – SASTA Study Guide (2011 ed) Glistak

What are the prerequisites?

A high C grade in Stage 1 Physics, Chemistry OR Biology



Contact Details

For more information about studying Year 12 at Trinity College Senior, please contact the Head of Year 12 on 8523 8705 or visit: www.trinity.sa.edu.au/curriculum/index.htm

Further Information

More information about SACE may be obtained from the SACE Board of South Australia webpage at: www.sace.sa.edu.au