

# VCE Biology

The life science of Biology looks at the forms and functions of living things (organisms); how they relate to each other and to their environment. Studies in Biology have resulted in a modern, more complex understanding of the process of life.

Unit 1 & 2	Unit 3 & 4
<p>In Unit 1 &amp; 2 you will:</p> <ul style="list-style-type: none"> <li>• Explore cell structure and lifecycle of cells</li> <li>• Understand how plant and animal systems function and maintain a stable internal environment</li> <li>• Undertake a student designed practical investigation</li> <li>• Explore genetic inheritance of traits</li> <li>• Investigate reproductive processes for survival</li> <li>• Study adaptations of organisms within ecosystems</li> <li>• Investigate ethical issues relating to genetics</li> </ul>	<p>In Unit 3 &amp; 4 you will:</p> <ul style="list-style-type: none"> <li>• Explore the structure of nucleic acids and proteins and the processes of producing proteins within the cell</li> <li>• Understand DNA manipulation techniques and applications, considering the ethical implications</li> <li>• Learn about biochemical processes of photosynthesis and cellular respiration</li> <li>• Investigate organism responses to pathogens via different levels of immunity</li> <li>• Explore how species are related and patterns of evolution</li> <li>• Undertake a student designed practical investigation</li> </ul>
Types of assessment	Class Activities
<ul style="list-style-type: none"> <li>• Tests and examinations</li> <li>• Data analysis</li> <li>• A report of a practical activity</li> <li>• Case study analysis</li> <li>• Analysis of bioethical issues</li> <li>• Research report</li> </ul>	<ul style="list-style-type: none"> <li>• Experiments</li> <li>• Problem Solving</li> <li>• Data Analysis</li> <li>• Scientific Poster</li> <li>• Modelling</li> <li>• Quizzes</li> </ul>

## Careers that may link to this subject area

Biochemist	Dentist	Doctor	Ecologist
Geneticist	Immunologist	Nurse	Osteopath
Paramedic	Park Ranger	Pharmacist	Physiotherapist
Science Teacher	Scientist	Speech Pathologist	

