

### What is Biology?

Biology is the study of the diversity of life as it has evolved and as it interacts and functions. Investigation of biological systems and their interactions has led to biological knowledge and understanding that enable us to explore and explain everyday observations, find solutions to biological issues, and understand the processes of biological continuity and change over time.

### How will Biology help me in the future?

This course encourages students to develop their investigative, analytical and communication skills through field, laboratory and research investigations of living systems and through critical evaluation of the development, ethics, applications and influences of contemporary biological knowledge in a range of contexts, such as marine reefs, endangered species, urban ecology or biotechnology. Students will also learn to use scientific evidence to make informed decisions about controversial issues.

### What careers can Biology lead to?

Biology can prepare students for a range of careers, including those in medical, veterinary, food and marine sciences, agriculture, biotechnology, environmental rehabilitation, biosecurity, quarantine, conservation and eco-tourism.

### What content will I study in Year 11 and Year 12?

Year 11	
<b>Biology ATAR Unit 1:</b> Students analyse biotic and abiotic ecosystem components and their interactions, using classification systems for data collection, comparison and evaluation.	<b>Biology ATAR Unit 2:</b> Students investigate the interdependent components of the cell system and the multiple interacting systems in multicellular organisms.
Year 12	
<b>Biology ATAR Unit 3:</b> Students investigate mechanisms of heredity and the ways inheritance patterns can be explained, modelled and predicted; they connect this to population dynamics and apply the theory of evolution by natural selection in order to examine population changes.	<b>Biology ATAR Unit 4:</b> Students investigate system change and continuity in response to changing external conditions and pathogens; they investigate homeostasis and the transmission and impact of infectious disease, as well as factors that encourage or reduce the spread of these diseases.

## LEARN MORE

Visit: <https://senior-secondary.scsa.wa.edu.au/syllabus-and-support-materials/science/biology>

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