

# VCE Biology

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**Seymour**  
College

# Biology – The Study of Living Things

- What makes something 'alive'?
- How is life regulated?
- What makes groups of living things similar and different?
- What is required to sustain life?
- How has life changed over time?
- How is biotechnology affecting society, now and in the future?
- Ethical issues and Biomedicine



# Course Overview

## Unit 1 – How do organisms regulate their functions?

*Cell unit of life, Cellular growth, Stem cells and Nanotechnology, Body systems, Homeostasis.*

## Unit 2 – How does inheritance impact diversity?

*Genetics and Inheritance, Cloning technologies and Ethical issues, Adaptation and Ecosystems, First nation people's contribution to habitat appreciation and survival.*

## Unit 3 – How do cells maintain life?

*DNA and protein metabolism, Photosynthesis and Respiration, DNA manipulation techniques.*

## Unit 4 – How does life change and respond to challenges over time?

*Immunity and disease, evolution and **practical investigation***



# Pathways

- Biological Research – zoology, botany, pharmacology, microbiology, genetics.
- Health Sciences – nursing & midwifery, medicine, pharmacy, allied health.
- Biotechnology / Biomedicine
- Genetic Counselling.
- Education
- Veterinary Science
- Equine industry
- Science Journalism
- Marine biology
- Ecology/Environmental Science
- Agriculture



## Sounds good?

- Biology is complex but rewarding
- To succeed in this subject you will need to:
  - Be passionate about it
  - Work hard.
  - Satisfy your curiosity in researching
  - Complete independent study.
  - Participate in class discussions & practical activities.
- Come and talk to Ms Gao or Mr Jimenez for more information about this amazing field of Science!

