# **Human Biology ATAR**

Year 11 Course Code	AEHBY
Year 12 Course Code	ATHBY
Highly Recommended	Year 11: Year 10: A or B grade throughout the year. 65% in both semester Science examinations. 90% attendance in Year 10. OLNA Category 3. Recommendation by Head of Learning Area.
	Year 12: C grade or higher in Year 11 Human Biology
Cost	\$70.00 (cost is approximate – subject to change)

#### Year 11 and Year 12 Course Overview

The Human Biology ATAR course gives students a chance to explore what it is to be human, how the human body works, the origins of human variation, inheritance in humans, the evolution of the human species and population genetics. Through their investigations, students research new discoveries that increase our understanding of human dysfunction, treatments and preventative measures.

Practical tasks are an integral part of this course and develop a range of laboratory skills; for example, biotechnology techniques. Students learn to evaluate risks and benefits to make informed decisions about lifestyle and health topics, such as diet, alternative medical treatments, use of chemical substances and the manipulation of fertility.

## **Year 11 Course Structure**

Unit 1 - The functioning human body

This unit looks at how human structure and function supports cellular metabolism and how lifestyle choices affect body functioning.

#### Unit 2 - Reproduction and inheritance

This unit provides opportunities to explore, in more depth, the mechanisms of transmission of genetic materials to the next generation, the role of males and females in reproduction, and how interactions between genetics and the environment influence early development.

### **Year 12 Course Structure**

Unit 3 - Homeostasis and disease

This unit explores the nervous and endocrine systems and the mechanisms that help maintain the systems of the body to function within normal range, and the body's immune responses to invading pathogens.

### Unit 4 - Human variation and evolution

This unit explores the variations in humans in their changing environment and evolutionary trends in hominids.