



Highfields State
Secondary College

Semester 2 Course Overview

Faculty: Science
Subject: Agricultural Science
Year level: 11

Course Outline

Agricultural Science is an interdisciplinary science subject suited to students who are interested in the application of science in a real-world context. They understand the importance of using science to predict possible effects of human and other activity, and to develop management plans or alternative technologies that minimise these effects and provide for a more sustainable future. Agricultural Science provides students with a suite of skills and understandings that are valuable to a wide range of further study pathways and careers. A study of Agricultural Science can allow students to transfer learned skills to studies of other subject disciplines in the school environment.

The following objectives are assessed across the course of study;

1. describe and explain scientific concepts, theories, models and systems and their limitations
2. apply understanding of scientific concepts, theories, models and systems within their limitations
3. analyse evidence
4. interpret evidence
5. investigate phenomena
6. evaluate processes, claims and conclusions
7. communicate understandings, findings, arguments and conclusions

Semester 2	
Unit 2: Resources	Unit 3: Agricultural Production
In Unit 2, students explore the variety of resources, including soil, water, biota and technologies that are required for sustainable agricultural production. An understanding of resources and ecosystems is essential for appreciating sustainable resource use and justifying management decisions in agricultural enterprises. Students conduct experiments and investigations in water quality, soil properties and climatic variables. They examine how agricultural innovations and technologies can affect agricultural enterprises, and make recommendations about research, innovation and management practices.	In Unit 3, students explore the ways agricultural science is used to describe and explain how the anatomy and physiology of agricultural plants and animals influences agricultural production. An understanding of the anatomy and physiology of plants and animals is needed to appreciate their influence on production and justify management decisions. Students design and conduct experiments and investigations on anatomical and physiological phenomena and analyse their effect on production.
Formative Assessment Semester 1 and 2 Exam, 2 x 90 minutes plus 10 minutes perusal	Formative Assessment Monitoring Test (Assessed in Term 4) Students will complete a short response test in order to monitor progress of unit 3.