



DURATION OF SUBJECT	FULL YEAR	FINANCIAL COMMITMENT	NIL
----------------------------	-----------	-----------------------------	-----

COURSE CONTENT

Year 10 SMART Ag Science – Feeding the World by land, water, and air!

UNIT 1	UNIT 2	UNIT 3	UNIT 4
<p>Hydroponics & Aquaculture</p> <p>Investigation of hydroponics and aquaculture systems, maintenance and set up of plants such as strawberries and lettuce, Jade Perch.</p> <p>Investigate the sustainability of an aquaculture system with the harvest of plants and fish at the end of the year.</p>	<p>Cattle Production</p> <p>Investigation of intensive and extensive cattle production systems in northern and southern Australia.</p> <p>Cattle anatomy (what they look like) and physiology (how they function).</p> <p>Investigation of different breeds and their fit for purpose in their different environments.</p>	<p>Improved Pastures</p> <p>Investigation of different pastures and grasses; and how animals make use of them.</p> <p>Development of a plan for fertilising and seeding paddocks for improved grass and plant quality to achieve the best nutritional outcomes for animals.</p> <p>Collecting data on different grass species and their growth in trial plots.</p>	<p>Meat Chickens</p> <p>Investigation of a meat chicken feed trial with a comparison of different breeds.</p> <p>Understanding of chicken digestive systems and different feed rations.</p> <p>Study of different rations and which suits a chicken for growth and development the best.</p>
ASSESSMENT	ASSESSMENT	SUMMATIVE ASSESSMENT	SUMMATIVE ASSESSMENT
<p>Examination</p> <p>Exam questions on hydroponic, fish and redclaw systems, plant and fish anatomy and physiology.</p>	<p>Research Investigation</p> <p>Students will investigate GPS tracking of animals to study the reasons behind their behaviour.</p>	<p>Student Experiment</p> <p>Students will conduct an experiment on the growth of different grass and plant varieties in trial paddock plots.</p>	<p>Data Test</p> <p>Data test questions on the growth of the different chicken' breeds and the qualities of different rations fed.</p>

COURSE REQUIREMENTS

No prerequisite subjects required, however a 'C' in Year 9 Agriculture, English and Maths is an advantage.

CAREER PATHWAYS

Students considering a career in agriculture would be ideally suited, provide a solid foundation for senior agriculture subjects.

This subject leads directly into senior agricultural subjects – it is designed to give you a foundation knowledge that you can build on, in Year 11 & 12.

This subject would fit into the STEAM Hub.

INTERNET LINKS

- Australian Agriculture Employment | <http://www.ruralcareers.net.au/agriculture> | <https://farmers.org.au>
- Australian Agriculture overview | https://www.youtube.com/watch?v=fFUZ_j2cCe0
- The farm and the environment | <https://www.youtube.com/watch?v=Tgfvymh5Zns>
- The future of farming technology | <https://www.youtube.com/watch?v=Qmla9NLFbVU>

