

AGRI 1010 PROTECTED CROPPING CLIMATE CONTROL AND TECHNOLOGY

Legacy Code 301263

Coordinator Lihua Li ([https://directory.westernsydney.edu.au/search/name/Lihua Li/](https://directory.westernsydney.edu.au/search/name/Lihua%20Li/))

Student Contribution Band

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Outline plant growth behaviour and measurements of crop performance
2. Explain why and how crops respond to environmental factors
3. Describe the greenhouse technologies available to growers that facilitate environmental control
4. Design a program which will optimise inputs for a specific crop in a controlled environment
5. Simulate the management of a controlled growing environment - (AHCPT503)
6. Report on future prospects and solutions for growing crops in managed environments

Subject Content

- 1.Understanding plant behaviour
- 2.Measuring crop performance
- 3.Crop response to environmental factors
- 4.Sensor technology
- 5.Radiation, temperature, coverings and supplemental lighting
- 6.Heating, cooling and dehumidifying
- 7.Vertical farm technology
- 8.Optimising inputs
- 9.Managing a controlled growing environment (AHCPT503)
- 10.Gene technology
- 11.Robotics
- 12.Identifying future prospects

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Mandatory Group Task
Portfolio	1,000 words or equivalent	20	N	Individual
Professional Task	1,500 words or equivalent	30	Y	Individual
Investigative Report	1,000 words or equivalent	30	N	Individual
Final Quiz	1 hour	20	N	Individual