



# AGRI11002 *Plant Science and Crop Production*

## Term 2 - 2021

Profile information current as at 27/04/2024 11:00 pm

All details in this unit profile for AGRI11002 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

## General Information

### Overview

In this unit, you will be introduced to the foundations of plant science including introductory plant physiology (structure and function), and taxonomy related to agricultural cropping. You will investigate a range of crop production systems including dry-land, irrigated, intensive vegetable cropping, broad acre grain and fibre cropping, horticulture and orchard cropping. You will develop knowledge of crop nutrition, crop protection, agri-tech, environment impacts and legislation relevant to cropping, which will provide you with the foundations from which you will extend your learning in future units in this course.

### Details

Career Level: *Undergraduate*

Unit Level: *Level 1*

Credit Points: 6

Student Contribution Band: 7

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

There are no requisites for this unit.

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

### Offerings For Term 2 - 2021

- Bundaberg
- Emerald
- Mixed Mode
- Rockhampton

### Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

### Residential Schools

This unit has a Compulsory Residential School for distance mode students and the details are:

Click here to see your [Residential School Timetable](#).

### Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

## Class and Assessment Overview

### Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

### Class Timetable

#### [Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

#### [Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

### Assessment Overview

#### 1. **Online Quiz(zes)**

Weighting: 30%

#### 2. **Portfolio**

Weighting: 30%

#### 3. **Written Assessment**

Weighting: 40%

### Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

## CQUniversity Policies

**All University policies are available on the [CQUniversity Policy site](#).**

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

## Previous Student Feedback

### Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

#### Feedback from Moodle Site (SUTE)

##### Feedback

The take home practical exercises helped to support learning from home.

##### Recommendation

Remotely available practical exercises will be provided during term.

#### Feedback from Moodle Site (SUTE)

##### Feedback

The weekly revision questions provided in lectures as formative assessment helped to support learning and revision.

##### Recommendation

Formative assessment and revision questions will be provided.

## Unit Learning Outcomes

**On successful completion of this unit, you will be able to:**

1. Explain the fundamentals of plant science including plant physiology (structure and function), and taxonomy related to agricultural cropping
2. Identify key technologies that improve the productivity and environmental sustainability of cropping
3. Develop a crop management plan for a crop production system
4. Critique and explain the environmental and legislation requirements of crop management systems.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



N/A  
Level



Introductory  
Level



Intermediate  
Level



Graduate  
Level



Professional  
Level



Advanced  
Level

### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Online Quiz(zes) - 30%	•	•		•
2 - Portfolio - 30%	•	•		
3 - Written Assessment - 40%		•	•	•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
1 - Communication	•	•	•	•
2 - Problem Solving		•	•	•
3 - Critical Thinking		•	•	•
4 - Information Literacy	•		•	•
5 - Team Work				
6 - Information Technology Competence	•	•	•	
7 - Cross Cultural Competence				
8 - Ethical practice			•	•
9 - Social Innovation				
10 - Aboriginal and Torres Strait Islander Cultures				

## Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Online Quiz(zes) - 30%		•	•	•						
2 - Portfolio - 30%	•		•	•	•	•				
3 - Written Assessment - 40%	•	•	•	•		•				

## Textbooks and Resources

### Textbooks

**There are no required textbooks.**

### IT Resources

**You will need access to the following IT resources:**

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

## Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)  
For further information, see the Assessment Tasks.

## Teaching Contacts

**Tieneke Trotter** Unit Coordinator  
[t.trotter@cqu.edu.au](mailto:t.trotter@cqu.edu.au)

## Schedule

### Week 1 - 12 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Plant Structure	There is no prescribed text book for this unit. Readings and additional materials will be provided each week on the Moodle site.	

### Week 2 - 19 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Plant Function		

### Week 3 - 26 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Plant Development		<b>Online Quiz 1</b> Open: Week 3 Friday (30 Jul, 2021) Closed: Week 4 Thursday 5 Aug. 2021) 5:00 pm AEST.

### Week 4 - 02 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Taxonomy		

### Week 5 - 09 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Crop Production Systems		

### Vacation Week - 16 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
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### Week 6 - 23 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Agronomic Practices		<b>Online Quiz 2</b> Open: Week 6 Friday (27 Aug. 2020) Closed: Week 8 Thursday (9 Sep. 2020) 5:00 pm AEST.

### Week 7 - 30 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Residential School		Residential School: Rockhampton North Campus Wednesday 1 Sep. 2021 to Thursday 2 Sep. 2021.

### Week 8 - 06 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Nutrition		

### Week 9 - 13 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Crop Protection		<b>Practical Book and Field Trip Report</b> Due: Week 9 Friday (17 Sept 2021) 5:00 pm AEST

**Week 10 - 20 Sep 2021**

Module/Topic	Chapter	Events and Submissions/Topic
Agri-tech		

**Week 11 - 27 Sep 2021**

Module/Topic	Chapter	Events and Submissions/Topic
Environmental Impacts and Legislation		

**Week 12 - 04 Oct 2021**

Module/Topic	Chapter	Events and Submissions/Topic
Bio-security, Harvest and Post-harvest		

**Review/Exam Week - 11 Oct 2021**

Module/Topic	Chapter	Events and Submissions/Topic
		<b>Agronomic Growers Note</b> Due: Review/Exam Week Wednesday (13 Oct 2021) 5:00 pm AEST

**Exam Week - 18 Oct 2021**

Module/Topic	Chapter	Events and Submissions/Topic

## Term Specific Information

This unit has a compulsory residential school which is held Rockhampton on Wednesday and Thursday of Week 7.

## Assessment Tasks

### 1 Online Quizzes

**Assessment Type**

Online Quiz(zes)

**Task Description**

**Quiz 1 (15%) Opens: Week 3 Friday (30 Jul. 2021) Closed: Week 4 Thursday (5 Aug. 2021) 5:00 pm AEST.**

This quiz will assess your understanding of content delivered during lectures and tutorials in Weeks 1 to 3. The quiz will consist of a variety of questions which might include short answer, multiple choice, matched pairs and calculations.

**Quiz 2 (15%) Opens: Week 6 Friday (27 Aug. 2021) Closed: Week 8 Thursday (9 Sep. 2021) 5:00 pm AEST.**

This quiz will assess your understanding of content delivered during lectures and tutorials in Weeks 4 to 6. The quiz will consist of a variety of questions which might include short answer, multiple choice, matched pairs and calculations.

**Number of Quizzes**

2

**Frequency of Quizzes**

Other

**Assessment Due Date**

Quiz 1 (15%) Opens: Week 3 Friday (30 Jul. 2021) Closed: Week 4 Thursday (5 Aug. 2021) 5:00 pm AEST. Quiz 2 (15%) Opens: Week 6 Friday (27 Aug. 2021) Closed: Week 8 Thursday (9 Sep. 2021) 5:00 pm AEST.

**Return Date to Students**

Online Quiz 1: Week 6 Wednesday (25 Aug. 2021). Online Quiz 2: Week 10 Wednesday (22 Sep. 2021).

**Weighting**

30%

**Minimum mark or grade**

50% of total quiz grade

**Assessment Criteria**

The quiz will consist of a variety of questions which might include short answer, multiple choice, matched pairs and

calculations. The responses to these questions will be assessed according to their quality, accuracy and level of detail.

### Referencing Style

- [Harvard \(author-date\)](#)

### Submission

Online

### Submission Instructions

Online quizzes can be accessed through the Moodle site.

### Learning Outcomes Assessed

- Explain the fundamentals of plant science including plant physiology (structure and function), and taxonomy related to agricultural cropping
- Identify key technologies that improve the productivity and environmental sustainability of cropping
- Critique and explain the environmental and legislation requirements of crop management systems.

### Graduate Attributes

- Problem Solving
- Critical Thinking
- Information Literacy

## 2 Practical Book and Field Trip Report

### Assessment Type

Portfolio

### Task Description

This assessment task requires you to undertake practical activities and a field trip on the compulsory residential school and to write up your findings in a practical book template which can be found on the Moodle site. You will receive instructions and guidance during the residential school which will help you to undertake the practical tasks. You will collate data and evidence and complete the worksheets in the practical book template. You will also undertake a field trip where you will visit a property and will be required to complete a short report in the practical book template, on the production system at that farm. You will report on the different components of the production system including; inputs, outputs, post-harvest management, marketing etc. that make up the entire production system. You will include your own recommendations on how the producer can improve the production system, through use of a technology, innovation, practice or resource not currently utilised at the property.

### Assessment Due Date

Week 9 Friday (17 Sept 2021) 5:00 pm AEST

Online submission through the Moodle site.

### Return Date to Students

Week 11 Friday (1 Oct 2021)

### Weighting

30%

### Minimum mark or grade

50%

### Assessment Criteria

- Presentation of data in appropriate diagrams, tables, graphs and statistical formats.
- Detail, accuracy and quality of answers, results and discussion.
- Content of field trip report including a demonstrated understanding of the production system.
- Quality, innovation and practicality of recommendations for improvement to the production system.
- The clarity of English expression, spelling and grammar.
- The appropriate use of appendices.

### Referencing Style

- [Harvard \(author-date\)](#)

### Submission

Online

### Submission Instructions

Online via Moodle site

## Learning Outcomes Assessed

- Explain the fundamentals of plant science including plant physiology (structure and function), and taxonomy related to agricultural cropping
- Identify key technologies that improve the productivity and environmental sustainability of cropping

## Graduate Attributes

- Communication
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence

## 3 Agronomic Growers Note

### Assessment Type

Written Assessment

### Task Description

This assessment requires you develop an agronomic growers note which would be suitable for distribution to crop producers. The agronomic growers note should be of a quality and standard suitable for distribution from a private agronomic consultant business or government advisory department.

You are required to select one crop from the set of options provided on the Moodle site. A agronomic growers note is a short communication which provides summarised information on how to grow a crop in a specific region. The agronomic growers note should present as an easy to read, instructive manual which is attractive to the reader and includes appropriate photographs and data in tables and graphs. The agronomic growers note will include the following:

1. Name of crop and growing region including a map.
2. Recommended varieties.
3. Calendar of operations from planting to harvest presented in a visual/graphic format.
4. Agronomic practices including cultivation, tillage and planting.
5. Nutrition and fertiliser requirement for the crop and application recommendations.
6. Crop protection - major weeds, pests and diseases with recommendations for management.
7. Harvest practices and post-harvest storage.
8. Environmental and legislative issues.

The agronomic growers note will be a maximum of 5 pages excluding references and appendices.

### Assessment Due Date

Review/Exam Week Wednesday (13 Oct 2021) 5:00 pm AEST

Online submission via Moodle site

### Return Date to Students

Exam Week Friday (22 Oct 2021)

### Weighting

40%

### Minimum mark or grade

50%

### Assessment Criteria

The agronomic growers note will be assessed on:

- Content detail, accuracy and quality of the information outlined in the task description.
- Presentation of information, images and data in appropriate figures, tables and graphs.
- The clarity of English expression, spelling and grammar.
- The appropriate use of references.
- Page length.

### Referencing Style

- [Harvard \(author-date\)](#)

### Submission

Online

### Submission Instructions

Online via Moodle site



## Learning Outcomes Assessed

- Identify key technologies that improve the productivity and environmental sustainability of cropping
- Develop a crop management plan for a crop production system
- Critique and explain the environmental and legislation requirements of crop management systems.

## Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence

## Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

### What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

### Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

### Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

### What can you do to act with integrity?

**Be Honest**

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own

**Seek Help**

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)

**Produce Original Work**

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem