AGRI11008 *Introduction to Agricultural Systems*
Term 1 - 2020

Profile information current as at 06/05/2024 06:13 am

General Information

Overview

This unit will introduce you to agricultural production systems, historical agricultural production methods including Indigenous agriculture, and the development of modern agricultural systems. You will learn the characteristics of important livestock, cropping and horticultural industries in Australia and discuss the economic, social and environmental sustainability of these systems. You will enhance your understanding of the pressure placed on the physical and biological resources upon which agricultural production depends. You will examine the impact of agricultural practices on the economics of primary production and on the environmental and social fabric of rural and urban communities. You will also explore the concept of agricultural production systems as managed ecosystems, and analyse the principles of ecosystems in natural and managed systems.

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 1 - 2020

- Bundaberg
- Emerald
- Online
- 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).

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. **Group Discussion**
Weighting: 10%
2. **Group Work**
Weighting: 40%
3. **Written Assessment**
Weighting: 50%

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.

Unit Learning Outcomes

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

1. Describe major agriculture production systems in Australia
2. Explain the factors that have led to changes in agricultural production systems throughout history
3. Explore the impact of key changes in the development of modern farming practices on the ecology of natural and agricultural systems
4. Identify the concepts of social, economic and environmental sustainability in agricultural production
5. Develop and review agricultural management strategies to address natural resource issues.

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	5
1 - Group Discussion - 10%	•	•			
2 - Group Work - 40%		•	•	•	
3 - Written Assessment - 50%			•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
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				•	•

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
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 - Group Discussion - 10%	•		•	•	•					
2 - Group Work - 40%	•		•	•	•	•		•	•	
3 - Written Assessment - 50%	•		•	•		•		•	•	

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)
- Zoom account (Free)

Referencing Style

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

Teaching Contacts

Sabine Tausz-Posch Unit Coordinator
s.tausz-posch@cqu.edu.au

Schedule

Week 1 - 09 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Agriculture Introduces the global scale of food production systems.	Readings will be provided on the Moodle site throughout the term.	

Week 2 - 16 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic

The History of Agriculture Reviews the history of agriculture including Indigenous approaches and the development of modern systems.		

Week 3 - 23 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Natural Ecosystems Introduces ecological principles in the context of energy flow and chemical cycling between organisms and the environment in natural ecosystems.		

Week 4 - 30 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Agro-ecosystems Applies ecological principles to farming systems and draws comparisons between managed (agro-ecosystems) and natural ecosystems.		**"Australia: From Indigenous to Modern Agriculture"** Due: Week 4 Monday (30 Mar 2020) 11:45 pm AEST

Week 5 - 06 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Farming Systems and Styles Introduces and compares different farming systems and styles such as conventional, organic and regenerative farming as well as permaculture and agroforestry.		

Vacation Week - 13 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - 20 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Crop Production Systems Explores the main crop production systems of Australia and provides a global perspective.		

Week 7 - 27 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Livestock Production Systems Explores the main livestock production systems of Australia and provides a global perspective.		

Week 8 - 04 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Current Challenges of Agriculture Outlines the current challenges facing agriculture including population growth, climate change and resource use efficiencies.		**"Productivity and sustainability of farming systems"** Due: Week 8 Monday (4 May 2020) 11:45 pm AEST

Week 9 - 11 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Digital Technology Discusses how digital technologies can be used to better understand agricultural systems.		

Week 10 - 18 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Adaptation and Mitigation Explores adaptation and mitigation strategies to alleviate the current challenges facing agriculture.		

Week 11 - 25 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Communities Reviews the impacts of agricultural practices on the environmental and social fabric of rural and urban communities.		

Week 12 - 01 Jun 2020

Module/Topic	Chapter	Events and Submissions/Topic
Integration of Concepts and Revision		

Review/Exam Week - 08 Jun 2020

Module/Topic	Chapter	Events and Submissions/Topic
		"Mitigating agricultural challenges" Due: Review/Exam Week Monday (8 June 2020) 11:45 pm AEST

Exam Week - 15 Jun 2020

Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 "Australia: From Indigenous to Modern Agriculture"

Assessment Type
Group Discussion

Task Description
Students will be arranged in small groups and participate in an online discussion about the factors that have caused changes in agricultural production methods throughout Australian history, including Indigenous approaches, drawing on content and literature presented in lectures and tutorials. Each student will then prepare a 500-word report summarising the outcomes of the group discussion and submit online.

Assessment Due Date
Week 4 Monday (30 Mar 2020) 11:45 pm AEST

Return Date to Students
Week 6 Monday (20 Apr 2020)

Weighting
10%

Minimum mark or grade
40%

Assessment Criteria

- Ability to discuss effectively with group members
- Knowledge of agricultural production systems throughout history
- Professional presentation including correct referencing and keeping to word limit

Referencing Style

- Harvard (author-date)

Submission
Online

Learning Outcomes Assessed

- Describe major agriculture production systems in Australia
- Explain the factors that have led to changes in agricultural production systems throughout history

Graduate Attributes

- Communication
- Critical Thinking
- Information Literacy
- Team Work

2 "Productivity and sustainability of farming systems"

Assessment Type
Group Work

Task Description
You will prepare a report that critically compares farming systems and styles in relation to its productivity and sustainability. For this assessment you will receive farm survey data from different farming systems and, working in small groups, you will analyse the data and present the results in a graph. As a group, you will then discuss the observed trends in relation to potential economic (productivity) and ecological consequences (sustainability). As an individual student, you will then write up the main findings and discussion points in a report and submit online. Your report will have 1100 (±10%) words with the following structure:

- Title (not included in the word count)
- Introduction of the farming systems evaluated (~300 words)
- Method: Specify what data were analysed and how (~200 words)
- Results: Describe the main findings including a figure and legend (~200 words)
- Discussion: Interpretation of the results including economic and ecological consequences (~350 words)
- Concluding remark (~50 words)
- References (not included in the word count)

Assessment Due Date
Week 8 Monday (4 May 2020) 11:45 pm AEST

Return Date to Students
Week 10 Monday (18 May 2020)

Weighting
40%

Minimum mark or grade
40%

Assessment Criteria

- Ability to effectively work in a group setting
- Ability to correctly analyse, present and interpret data
- Knowledge of different farming systems and styles and sustainability concepts
- Ability to draw information from provided scientific literature
- Professional presentation including correct referencing and keeping to word limit

Referencing Style

- Harvard (author-date)

Submission
Online

Learning Outcomes Assessed

- Explain the factors that have led to changes in agricultural production systems throughout history
- Explore the impact of key changes in the development of modern farming practices on the ecology of natural and agricultural systems
- Identify the concepts of social, economic and environmental sustainability in agricultural production

Graduate Attributes

- Communication
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Ethical practice
- Social Innovation

3 "Mitigating agricultural challenges"

Assessment Type
Written Assessment

Task Description
In this written assignment you will describe an agricultural production system and identify and analyse a current challenge this system is facing. You will propose and evaluate a potential strategy for mitigation of this challenge incorporating ecological, economic and social considerations. Your report will be based on scientific evidence and relevant publications must be referenced. Your written assignment will have 2000 (±10%) words with the following structure:

- Title (not included in the word count)
- Abstract (a maximum of 200 words)
- Introduction of the agricultural production systems (~500 words)
- Outline of the current challenge this production system is facing (~600 words)
- Strategy for mitigation (~600 words)
- Conclusion (~100 words)
- References (not included in the word count)

Assessment Due Date
Review/Exam Week Monday (8 June 2020) 11:45 pm AEST

Return Date to Students
Exam Week Friday (19 June 2020)

Weighting
50%

Minimum mark or grade
40%

Assessment Criteria

- Coherent and concise abstract covering all essential elements of the report while keeping to the word limit
- Knowledge of the selected farming system
- Knowledge of the current challenges facing agriculture
- Knowledge of mitigation concepts
- Ability to contextualise information used in the report
- Ability to draw information from provided scientific literature
- Professional presentation including correct referencing and keeping to word limit

Referencing Style

- Harvard (author-date)

Submission
Online

Learning Outcomes Assessed

- Explore the impact of key changes in the development of modern farming practices on the ecology of natural and agricultural systems
- Identify the concepts of social, economic and environmental sustainability in agricultural production
- Develop and review agricultural management strategies to address natural resource issues.

Graduate Attributes

- Communication
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice
- Social Innovation

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