



EVST19021 Sustainability Issues and Solutions

Term 3 - 2019

Profile information current as at 02/05/2024 02:19 pm

All details in this unit profile for EVST19021 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

The impacts of human populations on the natural environment are well studied but little progress has been made to improve the sustainability of our lifestyle due to the complex interactions among social, economic and environmental imperatives. In Sustainability Issues and Solutions you will investigate the impact of human activities on a range of living and non-living, renewable and non-renewable natural resources. By applying 'Systems Thinking' you will practise developing solutions that are economically, socially and environmentally sustainable. On completion of this unit you will have a broad appreciation of the balances underpinning both temporal and spatial variation in sustainability and human efforts to control these.

Details

Career Level: *Undergraduate*

Unit Level: *Level 3*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Minimum of 72 credit points

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 3 - 2019

- Online

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. **Written Assessment**

Weighting: 20%

3. **Written Assessment**

Weighting: 30%

4. **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 student evaluation.

Feedback

Students found the assessments interesting and broadened their understanding of current sustainability issues but may not be directly useful in their career.

Recommendation

The assessment items will continue to be based on current sustainability issues, but an attempt will be made to relate them more directly to possible activities in the workplace.

Feedback from Moodle student evaluation.

Feedback

Students liked the fact that unit materials were related to what was being discussed in the media at the present time.

Recommendation

The unit materials will continue to be updated to ensure they reflect current discussion in the media.

Unit Learning Outcomes

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

1. Discuss the economic, ethical and ecological issues associated with the sustainable utilisation of the earth's renewable and non-renewable natural resources.
2. Explain the importance of systems thinking and an understanding of temporal and spatial scales and feedback loops in determining solutions to sustainable management of resources.
3. Discuss the shortcomings in our understanding and acceptance of the processes that lead to sustainability.
4. Develop a range of possible strategies that would help to ensure the sustainable utilisation of natural resources.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	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 - Written Assessment - 20%	•	•	•	•		•	•	•		
2 - Written Assessment - 30%	•	•	•	•			•	•		
3 - Written Assessment - 40%	•	•	•	•		•	•	•		
4 - Group Discussion - 10%	•	•	•		•	•	•	•		

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

Judith Wake Unit Coordinator
j.wake@cqu.edu.au

Schedule

Week 1 - 11 Nov 2019

Module/Topic	Chapter	Events and Submissions/Topic
Sustainability concepts and the application of systems thinking	Study Guide Chapter 1	

Week 2 - 18 Nov 2019

Module/Topic	Chapter	Events and Submissions/Topic
Ecological, economic and social measures of sustainability	Study Guide Chapter 2	

Week 3 - 25 Nov 2019

Module/Topic	Chapter	Events and Submissions/Topic
Biodiversity	Study Guide Chapter 3	Forum 1 closes midnight Sunday 1st December 2019

Week 4 - 02 Dec 2019

Module/Topic	Chapter	Events and Submissions/Topic
Management of water resources	Study Guide Chapter 4	

Vacation Week - 09 Dec 2019

Module/Topic	Chapter	Events and Submissions/Topic
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Week 5 - 16 Dec 2019

Module/Topic	Chapter	Events and Submissions/Topic
Food production systems	Study Guide Chapter 5	Presentation: The impact of climate change on biodiversity Due: Week 5 Monday (16 Dec 2019) 11:45 pm AEST

Week 6 - 23 Dec 2019		
Module/Topic	Chapter	Events and Submissions/Topic
Marine resource management	Study Guide Chapter 6	Forum 2 closes midnight Sunday 5th January 2020
Week 7 - 06 Jan 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Energy generation and use	Study Guide Chapter 7	
Week 8 - 13 Jan 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Transport systems	Study Guide Chapter 8	Debate on the value of government legislation or regulations in improving environmental outcomes for Australian farms Due: Week 8 Monday (13 Jan 2020) 11:45 pm AEST
Week 9 - 20 Jan 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Building and urban design	Study Guide Chapter 9	Forum 3 closes midnight Sunday 26 th January 2020
Week 10 - 27 Jan 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Waste minimisation and reuse	Study Guide Chapter 10	
Week 11 - 03 Feb 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Population and sustainable development	Study Guide Chapter 11	
Week 12 - 10 Feb 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Cultural change and social innovation	Study Guide Chapter 12	Forum 4 closes midnight Sunday 16 th February 2020 Report on plastic recycling in Australia Due: Week 12 Monday (10 Feb 2020) 11:45 pm AEST
Exam Week - 17 Feb 2020		
Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Forum Posts

Assessment Type

Group Discussion

Task Description

You are required to post relevant comments to each of the four forums in Moodle to obtain the maximum marks. Each forum will be open for approximately three weeks. Forum posts must be 200 words or less and be presented as dot points.

There is no minimum mark or grade for this assessment item. Therefore, you do not have to attempt it in order to pass the course overall. However, it also means you will not be awarded a supplementary assessment if you come close to passing and/or you do not meet the criteria for a Pass grade in another assessment item.

Assessment Due Date

Forum 1 will close at the end of week 3, Forum 2 at the end of week 6, Forum 3 at the end of week 9 and Forum 4 at the end of week 12.

Return Date to Students

Mark will be available through the moodle gradebook.

Weighting

10%

Assessment Criteria

Your posts will be assessed on:

- Relevance to the question
- Evidence of critical thinking
- Clarity of arguments
- Conciseness of posts

Referencing Style

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

Submission

Online

Submission Instructions

Post to forums in Moodle

Learning Outcomes Assessed

- Discuss the economic, ethical and ecological issues associated with the sustainable utilisation of the earth's renewable and non-renewable natural resources.
- Explain the importance of systems thinking and an understanding of temporal and spatial scales and feedback loops in determining solutions to sustainable management of resources.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

2 Presentation: The impact of climate change on biodiversity

Assessment Type

Written Assessment

Task Description

Prepare a presentation that you could use to deliver to a group of your peers describing the impacts of climate change on an aspect of biodiversity. You need to provide a brief overview of the important role of biodiversity in ecosystem services and of the general impacts of climate change. For the bulk of your presentation, you need to look at some specific impacts of climate change on biodiversity such as impacts of change in rainfall or temperature regimes on a particular vegetation community or ecosystem type (e.g. mangrove communities in the Kimberley) or on a particular group of organisms within a specified area (e.g. Queensland tropical reef fish).

Your presentation should consist of a PowerPoint presentation of 15 slides (maximum), including the title slide and a slide of references. Add the extra information you would use during the presentation in the notes section below the slides. You should not have more than about seven dot points or 30 words per slide, and the notes section should be in dot point format and be between about 1000 and 1500 words in total for the entire presentation.

Pitch your material at an informed lay audience, by using clear concise English and avoiding the use of jargon.

Assessment Due Date

Week 5 Monday (16 Dec 2019) 11:45 pm AEST

Return Date to Students

Week 7 Monday (6 Jan 2020)

Weighting

20%

Minimum mark or grade

45%

Assessment Criteria

- Clarity of presentation and logical presentation of the issues
- Application of science and sustainability principles
- Comprehensive coverage of relevant issues
- Use of valid information sources and accuracy of reference details
- Appropriateness of language and presentation for audience

Referencing Style

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

Submission

Online

Submission Instructions

Upload into moodle as a word file

Learning Outcomes Assessed

- Discuss the economic, ethical and ecological issues associated with the sustainable utilisation of the earth's renewable and non-renewable natural resources.
- Discuss the shortcomings in our understanding and acceptance of the processes that lead to sustainability.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

3 Debate on the value of government legislation or regulations in improving environmental outcomes for Australian farms

Assessment Type

Written Assessment

Task Description

Prepare the arguments, both FOR and AGAINST, for a debate on the following statement:

It would be better for the environment if farmers are able to management their land, free from government legislation and regulation.

You need to choose some recent legislation or regulations related to the management of agricultural land or primary production in Australia and debate whether a particular piece of government legislation or regulation will or won't improve environmental sustainability on Australian farms. Some suggestions include the Queensland vegetation management laws and the amendments to the Environmental Protection Act to regulate runoff in reef catchments. Present the arguments for and against the statement, backing them up with references from scientific journals, government and NGO reports and other credible sources.

Focus on the likely outcomes in environmental sustainability of the relevant agricultural practices but include some of the social and economic issues as well. You need an overall understanding of the legislation or regulations and the land management practices they are designed to regulate, but don't need a detailed understanding of all the intricacies involved in the legislation or regulations. You are required to argue that imposing the regulations or legislation is required to improve environmental benefits.

Your arguments should be based on detailed scientific information, and while some of your arguments will be based on general principles, you should ensure you have researched the specific issue in depth.

Provide a brief introduction to the topic, then a series of arguments for each side of the debate in a TABLE with two columns headed: FOR and AGAINST. Complete your assignment with a brief concluding paragraph, setting out which side has the strongest arguments. Your assignment should not exceed 2000 words. Aim to have roughly equal numbers

of words for each case. Make sure you apply the principles of Systems Thinking, use only credible information sources, and cite references where applicable.

Assessment Due Date

Week 8 Monday (13 Jan 2020) 11:45 pm AEST

Return Date to Students

Week 10 Monday (27 Jan 2020)

Weighting

30%

Minimum mark or grade

45%

Assessment Criteria

Assignment will be assessed on:

- Comprehensive coverage of arguments both for and against
- Logical presentation of arguments
- Relevance of issues raised
- Clarity of expression
- Evidence of research and critical thinking
- Selection of credible sources and correct referencing

Referencing Style

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

Submission

Online

Submission Instructions

Submit a Word file into moodle

Learning Outcomes Assessed

- Discuss the shortcomings in our understanding and acceptance of the processes that lead to sustainability.
- Develop a range of possible strategies that would help to ensure the sustainable utilisation of natural resources.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Cross Cultural Competence
- Ethical practice

4 Report on plastic recycling in Australia

Assessment Type

Written Assessment

Task Description

Much of Australia's recycled plastics used to be exported to Asia for treatment but many Asian countries have stopped or greatly reduced their imports of recyclable plastic waste. Write a report on where the recyclable plastic waste from your municipal area goes, how it is treated or reprocessed, and suggest ways the recycling of plastic waste in Australia could be made more sustainable.

Format your assignment as a report with headings and an executive summary. Maximum word limit: 3000 words. The word count will include words in tables and the executive summary but not words in figures, or reference citations and list.

Assessment Due Date

Week 12 Monday (10 Feb 2020) 11:45 pm AEST

Return Date to Students

Exam Week Friday (21 Feb 2020)

Weighting

40%

Minimum mark or grade

45%

Assessment Criteria

- Logical and comprehensive presentation of information
- Evidence of critical thinking and problem solving
- Validity of conclusions from evidence presented
- Clarity of expression, evidence of research and accurate referencing
- Overall presentation, including format of diagrams and tables, correct grammar, spelling and punctuation.

Referencing Style

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

Submission

Online

Submission Instructions

Upload as word file to moodle

Learning Outcomes Assessed

- Explain the importance of systems thinking and an understanding of temporal and spatial scales and feedback loops in determining solutions to sustainable management of resources.
- Develop a range of possible strategies that would help to ensure the sustainable utilisation of natural resources.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

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