



ENVR11011 *Modern Environmental Issues*

Term 2 - 2023

Profile information current as at 05/05/2024 07:23 am

All details in this unit profile for ENVR11011 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 Modern Environmental Issues you will learn how scientific methods and knowledge inform issues of environmental concern. You will learn about different environments and their interaction with human population, resources and pollution, disturbance, atmospheric composition and air pollution, fossil fuels and renewable sources of energy, conservation and environmental management. You will begin to apply basic scientific knowledge and principles to researching and discussing environmental issues and 'wicked' problems.

Details

Career Level: *Undergraduate*

Unit Level: *Level 1*

Credit Points: 6

Student Contribution Band: 8

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 - 2023

- 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. **Online Quiz(zes)**

Weighting: 20%

2. **Presentation**

Weighting: 30%

3. **Take Home Exam**

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](#).

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 Student Feedback

Feedback

"I don't see how this class relates to my course."

Recommendation

For the video assessment, I will allow OHS students to focus on an OHS issue that affects them or their workplace. The requirements for research, highlighting the cause, effect and solution of the issue, and video content will remain the same.

Unit Learning Outcomes

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

1. Describe the underpinning science of environmental issues
2. Discuss possible solutions to environmental issues
3. Communicate the scientific basis of environmental issues to general audiences
4. Discuss the ecological and scientific principles relevant to understanding natural and human impacts on the environment
5. Synthesise information from scientific literature relating to modern environmental issues.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1 - Online Quiz(zes) - 20%			•	•	
2 - Presentation - 30%	•	•	•		•
3 - Take Home Exam - 50%	•	•		•	

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
1 - Communication	•	•	•	•	•
2 - Problem Solving		•		•	

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
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) - 20%		•	•							
2 - Presentation - 30%	•	•		•	•	•				
3 - Take Home Exam - 50%	•	•	•					•		

Textbooks and Resources

Textbooks

ENVR11011

Prescribed

Environment: the science behind the stories.

latest edition (latest edition)

Authors: Withgott JH & Laposata M

Benjamin Cummings (imprint of Pearson)

San Francisco , CA , USA

Binding: Paperback

[View textbooks at the CQUniversity Bookshop](#)

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Recent (but not necessarily latest) versions of installed software including Microsoft Word, Excel, and PowerPoint; Adobe reader, etc.
- Modern computer/laptop with sufficient hard drive & memory size, plus adequate Internet access and connection reliability to facilitate significant uploads/downloads/video streaming and sustained lengthy connections (e.g., for lecture downloads, Zoom tutorial sessions), with microphone and speakers (built-in or external) OR microphone+speaker headset (cheap '\$20' set is suitable).
- Camera or mobile phone capable of capturing video.
- Access to video editing software (eg Blender (no cost version), iMovie, etc.)

Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Nathan Brooks-English Unit Coordinator

n.english@cqu.edu.au

Schedule

Week 1 - 10 Jul 2023

Module/Topic	Chapter	Events and Submissions/Topic
Unit welcome and introduction. Introduction to concepts underpinning the discipline of Environmental Science and its application.	Textbook Chaps 1, 2 & 5 'Science and sustainability: an introduction to environmental science' 'Earth's physical systems: matter, energy, and geology', and 'Environmental systems and ecosystem ecology' (parts - see lecture).	ALL students to make at least one constructive post to the Week 1 'fortnightly assessable questions' online forum, and to post each fortnight thereafter to that week's topic after reviewing the preceding forum and group feedback. Week 1 discussion (fortnightly assessable questions) forum: Open Monday 9AM AEST, Week 1; Close Monday 11:59PM AEST, Week 2.

Week 2 - 17 Jul 2023

Module/Topic	Chapter	Events and Submissions/Topic
Demography, and the environmental problem of people.	Textbook Chap 8 'Human population'.	

Week 3 - 24 Jul 2023

Module/Topic	Chapter	Events and Submissions/Topic
Impacts of disturbance.	Textbook Chaps 4 & 6 'Species interactions and community ecology' and 'Environmental ethics and economics: values and choices' (part - see lecture).	Week 3 discussion (fortnightly assessable questions) forum: Open Monday 9AM AEST, Week 3; Close Monday 11:59PM AEST, Week 4.

Week 4 - 31 Jul 2023

Module/Topic	Chapter	Events and Submissions/Topic
Fuels and energy consumption	Textbook Chaps 19, 20 and 21 'Fossil fuels, their impacts and energy conservation', 'Conventional energy alternatives', and 'New renewable energy alternatives'.	

Week 5 - 07 Aug 2023

Module/Topic	Chapter	Events and Submissions/Topic
Mining and resource extraction.	Textbook Chap 23 'Minerals and mining'.	Week 5 discussion (fortnightly assessable questions) forum: Open Monday 9AM AEST, Week 5; Close Monday 11:59PM AEST, Week 6.

Vacation Week - 14 Aug 2023

Module/Topic	Chapter	Events and Submissions/Topic
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Week 6 - 21 Aug 2023

Module/Topic	Chapter	Events and Submissions/Topic
Air pollution.	Textbook Chap 17 'Atmospheric science and air pollution'.	

Week 7 - 28 Aug 2023

Module/Topic	Chapter	Events and Submissions/Topic
Accelerated climate change.	Textbook Chap 18 'Global climate change'.	Week 7 discussion (fortnightly assessable questions) forum: Open Monday 9AM AEST, Week 7; Close Monday 11:59PM AEST, Week 8.

Week 8 - 04 Sep 2023

Module/Topic	Chapter	Events and Submissions/Topic
Modern agriculture.	Textbook Chaps 'Soil and agriculture' and 'Agriculture, biotechnology, and the future of food' (parts - see lecture).	Video presentation of a local environmental issue Due: Week 8 Monday (4 Sept 2023) 11:59 pm AEST

Week 9 - 11 Sep 2023

Module/Topic	Chapter	Events and Submissions/Topic
Waste generation and management.	Textbook Chap 22 'Managing our waste'.	Week 9 discussion (fortnightly assessable questions) forum: Open Monday 9AM AEST, Week 9; Close Monday 11:59PM AEST, Week 10.

Week 10 - 18 Sep 2023

Module/Topic	Chapter	Events and Submissions/Topic
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Aquatic and marine systems management.

Textbook Chaps 15 & 16 'Freshwater systems and resources' and 'Marine and coastal systems and resources'.

Week 11 - 25 Sep 2023

Module/Topic	Chapter	Events and Submissions/Topic
Native vegetation and forest management.	Textbook Chap 12 'Forests, forest management, and protected areas'.	Week 11 discussion (fortnightly assessable questions) forum: Open Monday 9AM AEST, Week 11; Close Monday 11:59PM AEST, Week 12.

Week 12 - 02 Oct 2023

Module/Topic	Chapter	Events and Submissions/Topic
Indigenous land management.	Textbook Chap 6 'Environmental ethics and economics: values and choices' or 'Environmental ethics and economics: values and choices' (part - see lecture).	

Review/Exam Week - 09 Oct 2023

Module/Topic	Chapter	Events and Submissions/Topic
		End of Term Online Quiz Due: Review/Exam Week Monday (9 Oct 2023) 11:45 pm AEST

Exam Week - 16 Oct 2023

Module/Topic	Chapter	Events and Submissions/Topic
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Assessment Tasks

1 Fortnightly Assessable Questions (FAQs)

Assessment Type

Online Quiz(zes)

Task Description

Fortnightly assessable questions (20%)

Every other week of the term, beginning in Week 1, you need to participate in the Fortnightly Assessable Questions (FAQ's) forum that will relate to the previous two weeks' unit content. The FAQ's assessment is designed to enhance learning, encourage peer-learning and help you develop new ways of thinking about modern issues in environmental science. Every other Monday (and the week following) you can access the FAQ's assessment via the link published in that week's tasks on the unit Moodle site, and follow the specific instructions for that particular forum task. A 'model' answer and other feedback will be posted once the period for student posts has closed and within one week. Posts after the closure date of a forum will not receive any marks. Forum responses in Weeks 3, 5, 7, 9, and 11 will attract a maximum of 4 marks each (20 marks total). The Week 1 forum will not be marked but allows students to introduce themselves to other ENVR11011 students and to get used to the FAQ's forum and format.

There is a word limit on each post of 400 words (just <1 page), citations (including the parenthetical citation in the text) are excluded from word count. I anticipate answers to the FAQ's will take up to 1.5 hours to research and up to 1.5 hours to craft. Dot points are acceptable when appropriate.

All discussion (fortnightly assessable questions) forums open at 9 am AEST on Mondays and close a week later.

Number of Quizzes

5

Frequency of Quizzes

Fortnightly

Assessment Due Date

Forums will open at 9:00AM AEST on Monday of Weeks 1, 3, 5, 7, 9 and 11 and each forum will close one week (7 calendar days) later at 11:59PM AEST.

Return Date to Students

Forum posts will be read in detail and feedback provided on a fortnightly basis. Marks will be returned to students two weeks after the close of the respective FAQ..

Weighting

20%

Minimum mark or grade

Average of 50% or above.

Assessment Criteria

You will be graded in this assessment on your constructive participation rather than solely on the accuracy of your answer (because there will be no single correct or complete answer possible).

Note that 'constructive participation' is defined here as providing a reasoned rationale based on environmental science principles and supported by evidence (**not** just stating agreement or disagreement with an earlier post or the topic question), and means a post must include some new (to the forum) relevant information (**not** simply restating or paraphrasing the views expressed in earlier posts to the forum). **Quantitative information and citation of relevant scientific journal articles in your answer is a requirement for full marks (engage with the numbers and use them to support your answer).**

Note that the Week 1 forum is not graded but please contribute just the same. You should participate constructively and within the relevant time frames in the remaining 5 forums to score full marks (*i.e.*, at 4 marks per forum for a maximum 20% of total unit marks).

- 1 mark — typically response(s) marred by multiple simple spelling or grammatical mistakes and/or is disorganised without clear points made or obvious reasoning and/or is a brief and superficial treatment of the issue or shows little relevance;
- 2 marks — typically response(s) marred by several spelling or grammatical errors and/or by no citation of sources, and only a few relevant points or arguments made (or more made but insubstantially) often not integrated well;
- 3 marks — typically response(s) displaying only a few spelling or grammatical errors, otherwise well-organised and considered/reasoned, exploring the issue adequately but no quantitative data or sources are limited and only textbooks and generalist websites and the like; and
- 4 marks — typically response(s) display only a couple of spelling or grammatical errors, concise and excellent organisation of clear, salient and reasoned points and arguments exploring the issue in depth, and supported by quantitative data and citing numerous scientific sources and in the proper manner.

Please note there is a minimum achievement level set for this assessment task, *i.e.*, you must equal or exceed the set minimum achievement level for this assessment in order to be considered for a passing grade for the course overall (irrespective of your achievement level in other assessment activities).

Referencing Style

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

Submission

Online

Submission Instructions

Considering the assessment criteria, make at least one post to each fortnightly 'Forum Post (group discussion of fortnightly assessable questions)' before that discussion closes.

Learning Outcomes Assessed

- Communicate the scientific basis of environmental issues to general audiences
- Discuss the ecological and scientific principles relevant to understanding natural and human impacts on the environment

Graduate Attributes

- Problem Solving
- Critical Thinking

2 Video presentation of a local environmental issue

Assessment Type

Presentation

Task Description

This assessment task requires you to identify an important environmental issue in your local area that fits within one of

our weekly topics in the unit, and to submit a video presentation of its cause (or causes), effects, and the most likely possible solution.

Your video presentation should be five (5) minutes long ($\pm 10\%$ or 30 seconds).

There will be three broad components you will have to consider for this assessment:

1. Choice of suitable topic - fits within one of our weekly unit topics, a small enough topic to be adequately covered in 5 minutes (cause/effect/solution) and big enough to fill the 5 minute presentation without padding etc.;
2. Being entirely scientific and dispassionate in your approach to content (no value-laden language), including the use of relevant scientific concepts and terms (this will require considerable planning and research, e.g., construction of a script); and
3. Production of a reasonable video presentation (that will involve practice and shot planning so quality of the video production does not detract from the content).

Note that you are not expected to become a professional videographer or video editor, but there must be an adequate level of continuity to your submission.

Assessment Due Date

Week 8 Monday (4 Sept 2023) 11:59 pm AEST

Return Date to Students

Week 10 Monday (18 Sept 2023)

Weighting

30%

Minimum mark or grade

50%

Assessment Criteria

Submissions will be assessed on the criteria in the table below (roughly content 56%, presentation 44%):

Criterion	Maximum marks
Presentation topic fits within one of our weekly unit topics	5
Adequate detail of cause(s)	10
Adequate detail of effects	10
Adequate detail of solution(s)	10
Video duration is 5 mins $\pm 10\%$	5
Quality of oral expression (sentence construction, grammar, pronunciation, etc.)	10
How engaging is the presentation: High Medium or Low	5
Adequate video coverage of cause and effect components	10
General production quality of presentation (alignment of video and audio, video and audio are clear, etc.)	5
In-text source citation (5 marks max.) and reference list (5 marks max.)	10

Please note a minimum achievement level is set for this assessment activity (i.e., you must equal or exceed this set minimum achievement level for you to be considered for a passing grade for this unit overall, irrespective of your achievement in other assessment components in this unit).

Referencing Style

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

Submission

Online

Submission Instructions

Before the due date/time, the completed video presentation must be uploaded electronically to a cloud storage site (e.g. OneDrive, CQUni can provide you access) AND the link uploaded in a .docx or .txt document to moodle (unless approval is granted for later submission via the online 'Assignment extension' system). The video presentation must be in one of the following electronic formats: (M4V), (MOV), (MOVIE), (MP4), (MPEG), (MPG), (WEBM) or (AVI) or it will not receive full marks. You must set the permissions to allow those who have a link to access and view the video.

Learning Outcomes Assessed

- Describe the underpinning science of environmental issues
- Discuss possible solutions to environmental issues

- Communicate the scientific basis of environmental issues to general audiences
- Synthesise information from scientific literature relating to modern environmental issues.

Graduate Attributes

- Communication
- Problem Solving
- Information Literacy
- Team Work
- Information Technology Competence

3 End of Term Online Quiz

Assessment Type

Take Home Exam

Task Description

The Online End of Term Quiz is a total of 40 marks. The marks are divided among three (3) questions total: two (2) Short Answer questions at 5 marks each; and one (1) Long Answer question for 30 marks. You must complete both (2) Short Answer questions for 10 marks total (5 marks each).

You must complete only one (1) of the Long Answer Questions (30 marks total). You will be provided three (3) Long Answer Questions to pick from (select the Long Answer question you are most comfortable answering). You must only attempt to answer one Long Answer Question (1). The short and long answer questions are each pulled randomly from a question bank of equally difficult questions of the same type. You have 3 hours to complete the quiz once you begin it. The quiz opens at 5AM AEST on Monday of Review/Exam Week (unless you have an approved extension request) and closes at 5AM AEST the next day. I have allowed 20 minutes to complete the Short Answer questions, another 30 minutes to read all three (3) Long Answer questions and then just over 2 hours to complete one (1) of the long answer questions that you select. You must begin the quiz 3 hours before it closes to get the full time to complete the quiz.

This is a TIMED, OPEN BOOK/INTERNET quiz. You may use any resources at your disposal, but the answers must be your own and in your own words (please see the CQU policy on Academic Misconduct). You may not use AI tools to provide draft answers. You may not work in groups or with others. I recommend you refer to the previous Fortnightly Assessable Question pages for ideas or sources, but do not copy or paraphrase those answers.

I strongly recommend you write your answers in a word processing program and then cut and paste the answers into the quiz when they are complete. You may also wish to have a calculator handy. Remember to answer the questions asked, and to clearly annotate what question you are answering, (e.g. "Part (a)"). Use properly cited sources to clearly support your position if they are required.

Assessment Due Date

Review/Exam Week Monday (9 Oct 2023) 11:45 pm AEST

Return Date to Students

Exam Week Monday (16 Oct 2023)

Weighting

50%

Minimum mark or grade

50%

Assessment Criteria

For the Short Answer questions, I am only looking for correctness of the answer (you do NOT need to provide sources, proofread, etc).

The criteria for the Long Answer questions are similar to those for the Fortnightly Assessable Questions except that the marks structure differs and there is **NO WORD LIMIT** and there is less emphasis on spelling/grammar (except as it impedes understanding).

- 1 to 8 marks: typically response(s) with spelling or grammatical mistakes that impede understanding and/or is disorganised without clear points made or obvious reasoning and/or is a brief and superficial treatment of the issue or shows little relevance with no citation of sources;
- 9 to 17 marks: typically response(s) with spelling or grammatical mistakes that impede understanding and/or by no citation of sources, and only a few relevant points or arguments made (or more made but insubstantially) often not integrated well;
- 18 to 24 marks: typically response(s) with spelling or grammatical mistakes that do **not** impede understanding, otherwise well-organised and considered/reasoned, exploring the issue adequately but no quantitative data or sources are limited and only textbooks and generalist websites and the like; and
- 24 to 30 marks: typically response(s) with spelling or grammatical mistakes that do **not** impede understanding, concise and excellent organisation of clear, salient and reasoned points and arguments exploring the issue in depth, and supported by quantitative data and citing numerous scientific sources and in the proper manner.

Referencing Style

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

Submission

Online

Learning Outcomes Assessed

- Describe the underpinning science of environmental issues
- Discuss possible solutions to environmental issues
- Discuss the ecological and scientific principles relevant to understanding natural and human impacts on the environment

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- 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