



# MARN13007 Coastal Marine Resources

## Term 2 - 2020

Profile information current as at 28/04/2024 06:06 am

All details in this unit profile for MARN13007 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

Coastal zones around the world are productive and dynamic environments, hosting a large variety of habitats and species that humans use for economic, societal, and recreational purposes. Human use of coastal resources is not without impacts, however, some of which can exacerbate natural events to harm environments and their continued sustainable use. In this unit you will learn about the relationships humans have with estuaries, coastal shorelines, and off-shore environments and habitats, focusing on the range of resource use, associated impacts, and their effective sustainable management. You will be required to synthesise and analyse information and data from multiple points of view (e.g. environmental, societal, economic, etc.), justifying conclusions that demonstrate 'best-practice' methodology for sustainable management across stakeholders. You will practice various forms of written communication, such as scientific tables, media releases, and posters, as part of your assessment. Your practical work will be assessed as part of an end-of-term summary report based on the unit's residential school activities and discussions.

### 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

Prerequisite: BOTN12010 OR ZOOL12009

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 - 2020

- 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. **Written Assessment**

Weighting: 15%

#### 2. **Written Assessment**

Weighting: 15%

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

Weighting: 15%

#### 4. **Report**

Weighting: 55%

### 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 evaluation

##### **Feedback**

Students expressed a desire for a clearer explanation of the requirements for assessment pieces.

##### **Recommendation**

The description and requirements of all assessment pieces will be reviewed and updated for future offerings to improve clarity of expectations and grading outcomes.

#### Feedback from Moodle evaluation

##### **Feedback**

A desire for greater time in between assessment items was suggested by one student.

##### **Recommendation**

As per each offering of this unit, the scheduling of assessment deadlines will be reviewed and coordinated to best fit in with the associated lecture content and the unit's residential school in order to maximise the time between assessment submission deadlines.

#### Feedback from Moodle evaluation and in-person

##### **Feedback**

Many students again showed their enthusiasm for the residential school, highlighting how much they learned and how applicable they felt it was to the 'real world'.

##### **Recommendation**

The residential school, and all assessments in this unit, are designed to be as representative of 'real world' tasks as possible, so this feedback is very pleasing. The current structure of the residential school will be maintained for future offerings.

## Unit Learning Outcomes

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

1. Identify the main components of coastal environments and explain their biological and resource-specific significance.
2. Compare and contrast the biological interactions between selected key organisms within a biological community.
3. Sample and quantify representative components of coastal environments to interpret the dynamics of the system.
4. Assess disturbances by natural and anthropogenic pressures.
5. Evaluate current coastal management programs and practices.
6. Practice laboratory and field sampling skills to acquire useful data in a safe and efficient manner.

## 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	6
1 - Written Assessment - 15%	•	•		•	•	
2 - Written Assessment - 15%		•			•	
3 - Written Assessment - 15%	•			•		
4 - Report - 55%			•			•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
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 - 15%	•	•	•	•		•		•		
2 - Written Assessment - 15%	•	•	•	•		•		•		
3 - Written Assessment - 15%	•	•	•	•	•			•		
4 - Report - 55%	•	•	•	•		•	•	•	•	

## 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

**Andrew Irving** Unit Coordinator  
[a.irving@cqu.edu.au](mailto:a.irving@cqu.edu.au)

## Schedule

### Week 1 - 13 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to coastal marine systems		

### Week 2 - 20 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Estuaries: Structures and processes		

### Week 3 - 27 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Estuaries: Seagrass communities		

### Week 4 - 03 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Estuaries: Threats and management		

### Week 5 - 10 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Coral Reefs: How to build one in four easy steps		

### Vacation Week - 17 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
		<b>Plastic pollution impacts on coastal communities</b> Due: Vacation Week Friday (21 Aug 2020) 11:45 pm AEST

### Week 6 - 24 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Coral Reefs: Managing impacts		
<b>Week 7 - 31 Aug 2020</b>		
Module/Topic	Chapter	Events and Submissions/Topic
Kelp Forests: Managing impacts		
<b>Week 8 - 07 Sep 2020</b>		
Module/Topic	Chapter	Events and Submissions/Topic
Coastal fisheries: Habitats and stocks		<b>Media release on a management issue relating to coral reefs or kelp forests</b> Due: Week 8 Friday (11 Sept 2020) 11:45 pm AEST
<b>Week 9 - 14 Sep 2020</b>		
Module/Topic	Chapter	Events and Submissions/Topic
Coastal fisheries: Management, policy, monitoring and compliance		
<b>Week 10 - 21 Sep 2020</b>		
Module/Topic	Chapter	Events and Submissions/Topic
Coastal fisheries: Impacts of fishing and impacts on fishing		
<b>Week 11 - 28 Sep 2020</b>		
Module/Topic	Chapter	Events and Submissions/Topic
Aquaculture: Demands and safeguards		<b>Poster presentation on a commercially important Australian fish, mollusc or crustacean</b> Due: Week 11 Friday (2 Oct 2020) 11:45 pm AEST
<b>Week 12 - 05 Oct 2020</b>		
Module/Topic	Chapter	Events and Submissions/Topic
Unit overview, Q & A		
<b>Review/Exam Week - 12 Oct 2020</b>		
Module/Topic	Chapter	Events and Submissions/Topic
		<b>Island development feasibility report</b> Due: Review/Exam Week Friday (16 Oct 2020) 11:45 pm AEST
<b>Exam Week - 19 Oct 2020</b>		
Module/Topic	Chapter	Events and Submissions/Topic

## Term Specific Information

Please note that due to COVID-19 restrictions, this unit will be delivered entirely online this term. All lectures, practicals, and assessment materials will be made available to you through the Moodle site for the unit. The field-based residential school that ordinarily occurs during this unit will **not** be run this term, but a substitute 'at home' experience provided in its place.

## Assessment Tasks

### 1 Plastic pollution impacts on coastal communities

## Assessment Type

Written Assessment

## Task Description

The DPSWR (Driver-Pressure-State-Welfare-Response) model discussed in lecture has proved a useful decision tool for resource managers. Drivers are largely economic and socio-political; **Pressures** are the result of the way in which Drivers change the environment; **State** change is a measure (or proxy) of the consequences of Pressures on species or ecosystems; human **Welfare** changes are measures of the 'costs' to society as a result of State changes; and **Responses** are how society attempts to reduce the Welfare impact or compensate for it through policies. Responses can be directed toward the Driver, Pressure, State and/or human Welfare Impacts.

Your task for this assessment is to construct a table that lists three different types of macroplastic and/or microplastic pollution pressure on coastal communities. For each pressure you will need to:

- describe the drivers of the pressure (Drivers),
- discuss the nature of the pressure (Pressure),
- describe how the pressure damages coastal communities (State change);
- describe how the change in state of coastal ecosystems may influence human welfare (Welfare); and
- list the current management practices that are in use to mitigate the listed impacts (Response).

*The structure of the table is up to you* but placing "Drivers", "Pressure", "State Change", "Welfare" and "Response" either as rows or column headings seems to work best. Dot points under your table headings are usually a good way to organise and present your information. Cite references you use in your table where appropriate, but you must add a full reference list on the final page of the document you submit. Nine references are the minimum expected for this assignment.

Additional helpful details about this assignment will be provided on Moodle, including an exemplar.

## Assessment Due Date

Vacation Week Friday (21 Aug 2020) 11:45 pm AEST

Please submit as a Word document via Moodle

## Return Date to Students

Week 7 Friday (4 Sept 2020)

Assignments will be returned via Moodle

## Weighting

15%

## Minimum mark or grade

40 %

## Assessment Criteria

This assignment will be assessed against the following criteria:

- Describe the components of coastal communities and their ecosystem functions (30%)
- Describe the impacts of plastic pollution on coastal communities (20%)
- List management options for plastics on coastal communities (30%)
- Clear writing style in correct English, proper sentence construction and the organisation of material into a logical sequence (10%)
- Correct format, accurate referencing, and appropriate length (10%)

The word length for this assignment is 1500 words.

## Referencing Style

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

## Submission

Online

## Submission Instructions

Please submit as a Word document via Moodle

## Learning Outcomes Assessed

- Identify the main components of coastal environments and explain their biological and resource-specific significance.
- Compare and contrast the biological interactions between selected key organisms within a biological community.
- Assess disturbances by natural and anthropogenic pressures.

- Evaluate current coastal management programs and practices.

### **Graduate Attributes**

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

## **2 Media release on a management issue relating to coral reefs or kelp forests**

### **Assessment Type**

Written Assessment

### **Task Description**

This task requires you to write a media release based on an impact or management approach to coral reef or kelp forest ecosystems that has been published in a recent scientific research journal (2014 till present).

A media release is a brief, punchy, and attention-grabbing form of written communication designed to raise the interest of TV stations, newspapers, magazines, websites etc. If considered “newsworthy”, the discovery you write about will get greater exposure (and maybe lead to fame and fortune!)

Your task is to prepare a media release based on a recent (2014 – present) scientific journal article discussing environmental impacts or their management in either coral reefs or kelp forests. You are free to choose the type of impact/management (i.e. natural vs anthropogenic) and its scale (i.e. microscopic to global), but the more universally relevant it is to humans, the more likely it is to be picked up by the media (e.g. the impacts of floods on the Great Barrier Reef is likely to generate more interest than the discovery of a new species of amoeba).

Further information, hints and tips about this assignment will be provided on Moodle, including an exemplar.

### **Assessment Due Date**

Week 8 Friday (11 Sept 2020) 11:45 pm AEST

Please submit as a 'Word' document via Moodle

### **Return Date to Students**

Week 10 Friday (25 Sept 2020)

Return will be done via Moodle

### **Weighting**

15%

### **Minimum mark or grade**

40%

### **Assessment Criteria**

This assignment will be assessed against the following criteria:

- Clear, informative, attention-grabbing title (13 %)
- Topic/issue clearly defined and explained (20 %)
- Clear summary of the scientific discovery (20 %)
- Clear summary of the application of new knowledge to enhanced management of habitat (20 %)
- Reference cited appropriately in the text and full citation provided below (7 %)
- Spelling and grammar (13 %)
- Adhering to word limit (7 %)

Note: The word limit of 500 words will be strictly enforced. One of the challenges of writing a media release is to keep the text short on length but heavy on highly relevant information. Succinct writing in this fashion is a valuable skill to learn, so please see the exemplar provided on Moodle as a guide.

Other assessment criteria (including hints and tips) will be provided on a separate file on the Moodle page. Please check your assignment against these criteria before submitting.

### **Referencing Style**

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

### **Submission**

Online

### **Submission Instructions**

Please submit as a 'Word' document via Moodle



## Learning Outcomes Assessed

- Compare and contrast the biological interactions between selected key organisms within a biological community.
- Evaluate current coastal management programs and practices.

## Graduate Attributes

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

## 3 Poster presentation on a commercially important Australian fish, mollusc or crustacean

### Assessment Type

Written Assessment

### Task Description

Australia has long enjoyed access to a wide variety of high-quality seafood, but there are many examples where particular fisheries have not been managed well and ultimately resulted in environmental impacts as well as economic and social distress (e.g. the collapse of a commercial fishery). Good management of a fishery requires an ongoing synthesis of knowledge from multiple areas, including a basic understanding of the biology of the species (especially their reproductive potential) and their population structure, species movement patterns and catch rate data, and economic profitability and license numbers.

Your task in this assessment is to construct a poster describing one inshore or estuarine Australian fish, mollusc or crustacean species that is subject to commercial fishing.

NOTE: Barramundi (*Lates calcarifer*) cannot be selected as the species for the poster.

The poster should consist of a concept diagram detailing the life cycle of the chosen species and identifying potential impacts on the recruitment success of this species at various stages in the life cycle. Your poster should include details of the following:

- Biology, distribution and reproductive strategies of the species,
- current management strategies,
- impacts of coastal developments, poor water quality and habitat degradation on the species and the fishery, and
- role/s of the species in coastal ecosystem/s.

Additional information about this assessment will be provided on Moodle during term, including an exemplar. Submission will be done online via Moodle, using an appropriate program to construct your poster (e.g. Word, PDF, Powerpoint, Publisher).

### Assessment Due Date

Week 11 Friday (2 Oct 2020) 11:45 pm AEST

Please submit via Moodle

### Return Date to Students

Review/Exam Week Friday (16 Oct 2020)

Assignments will be returned via Moodle

### Weighting

15%

### Minimum mark or grade

40 %

### Assessment Criteria

Your poster will be assessed according to the:

- Relevance, comprehensiveness and accuracy of information (including citation of appropriate scientific literature) (40%)
- Identification and critical analysis of impacts and management strategies (30%)
- Visual impact, organisation and readability of the poster and its conceptual diagrams (30%)

### Referencing Style

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

### Submission

Online

### Submission Instructions

Please submit via Moodle

### Learning Outcomes Assessed

- Identify the main components of coastal environments and explain their biological and resource-specific significance.
- Assess disturbances by natural and anthropogenic pressures.

### Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Ethical practice

## 4 Island development feasibility report

### Assessment Type

Report

### Task Description

For this assessment you will be required to synthesize information from a variety of sources and perspectives to develop a feasibility study of a proposed new (hypothetical) tourist resort on North Keppel Island. You will be provided with a broad range of materials (via Moodle) that will require you to develop and practice practical skills for quantifying coastal habitats and impacts. Additionally, readings will be provided that you'll need to synthesise in order to consider multiple aspects of developing a new resort, such as energy supply, waste management, environmental impacts, and cultural considerations, among others. Your task is not to pass judgement on whether a tourist resort should or shouldn't be built, but to instead present relevant information from multiple perspectives to allow for the most informed decision to be made regarding the construction of a new resort.

Additional helpful information on how to write your feasibility study will be provided on Moodle during term, including an exemplar. Additionally, you will be provided with an online study pack that will contain readings, tutorial videos, practical resources, as well as links to useful external web pages where you can gain additional relevant information and skills to help complete this assignment.

### Assessment Due Date

Review/Exam Week Friday (16 Oct 2020) 11:45 pm AEST

Please submit as a Word document via Moodle

### Return Date to Students

Exam Week Friday (23 Oct 2020)

Return will be via Moodle

### Weighting

55%

### Minimum mark or grade

50

### Assessment Criteria

Assessment of the feasibility report will be based on the following criteria:

Executive summary (5 %)

Background (15 %)

Methodology (10 %)

Data presentation and interpretation (30 %)

Summary (15 %)

References cited (5 %)

Bibliography (5 %)

Spelling and grammar (10 %)

Keeping to word limits (5 %)

The report will be limited to 2500 words.

### **Referencing Style**

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

### **Submission**

Online

### **Submission Instructions**

Please submit as a 'Word' document via Moodle

### **Learning Outcomes Assessed**

- Sample and quantify representative components of coastal environments to interpret the dynamics of the system.
- Practice laboratory and field sampling skills to acquire useful data in a safe and efficient manner.

### **Graduate Attributes**

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