



# MARN13007 Coastal Marine Resources

## Term 2 - 2018

Profile information current as at 15/05/2024 05:52 pm

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

Aquatic animals and plants of coastal zones are exposed to relatively large environmental fluctuations. The complexity of the dynamic biological communities in these zones is further impacted by the activities of humans. This unit focuses on three coastal marine communities: estuaries, coral reefs and inshore fisheries. The emphasis is on synecology and broad-scale ecological processes together with the management of these important marine resources.

### 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 - 2018

- Distance
- 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. **In-class Test(s)**

Weighting: 5%

#### 5. **Examination**

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 Moodle feedback

##### Feedback

The within-term assessment items again received positive feedback from students, e.g. "All of the assessment pieces were relevant and indicative of something you'd have to do in an enviro job." One student also suggested the residential school assessment carry a larger weighting toward their unit grade (currently 5%) because it was a "great assessment."

##### Recommendation

Retain the format of the within-unit assessment items, but look at expanding the elements that students most engaged with, including assessment weighting.

#### Feedback from Moodle feedback

##### Feedback

Sound quality of some lecture videos was poor in places.

##### Recommendation

Investigate identified lectures and approach IT for possible solutions.

#### Feedback from Moodle feedback

##### Feedback

Provision of additional examples for within-unit assessment items.

##### Recommendation

Additional examples for within-unit assessment items will be provided to help guide students.

## Unit Learning Outcomes

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

1. Identify the main components and explain their development as discrete sub-systems.
2. Compare and contrast the biological interactions between selected key organisms within a biological community.
3. Sample and quantify representative components so they can interpret the dynamics of the system.
4. Assess disturbances by natural and anthropogenic pressures.
5. Evaluate current coastal management programs and practices.
6. Complete basic practical work in a safe and efficient manner.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### 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%	•	•		•	•	

Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	6
3 - Written Assessment - 15%	•	•		•	•	
4 - In-class Test(s) - 5%			•			•

## 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 - Examination - 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)

## 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 - 09 Jul 2018

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

### Week 2 - 16 Jul 2018

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

### Week 3 - 23 Jul 2018

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

### Week 4 - 30 Jul 2018

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

### Week 5 - 06 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
How to build a coral reef in four easy steps		

### Vacation Week - 13 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
		<b>Anthropogenic impacts on coastal seagrass communities</b> Due: Vacation Week Friday (17 Aug 2018) 11:45 pm AEST

### Week 6 - 20 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
Coral reef impacts and management		
<b>Week 7 - 27 Aug 2018</b>		
Module/Topic	Chapter	Events and Submissions/Topic
Kelp forest impacts and management		
<b>Week 8 - 03 Sep 2018</b>		
Module/Topic	Chapter	Events and Submissions/Topic
Inshore fisheries and fish stocks		
<b>Week 9 - 10 Sep 2018</b>		
Module/Topic	Chapter	Events and Submissions/Topic
Biology and habitat of inshore fisheries: Monitoring and management		<b>Media release on an issue relating to coral reefs or kelp forests</b> Due: Week 9 Friday (14 Sept 2018) 11:45 pm AEST
<b>Week 10 - 17 Sep 2018</b>		
Module/Topic	Chapter	Events and Submissions/Topic
Monitoring and management of inshore fisheries: impacts of dredging		
<b>Week 11 - 24 Sep 2018</b>		
Module/Topic	Chapter	Events and Submissions/Topic
RESIDENTIAL SCHOOL 25th - 28th September		
<b>Week 12 - 01 Oct 2018</b>		
Module/Topic	Chapter	Events and Submissions/Topic
Unit overview and exam preparation		<b>Poster presentation on an Australian fish species</b> Due: Week 12 Friday (5 Oct 2018) 11:45 pm AEST <b>Brief written report based on the residential school</b> Due: Week 12 Friday (5 Oct 2018) 11:45 pm AEST
<b>Review/Exam Week - 08 Oct 2018</b>		
Module/Topic	Chapter	Events and Submissions/Topic
<b>Exam Week - 15 Oct 2018</b>		
Module/Topic	Chapter	Events and Submissions/Topic

## Term Specific Information

This unit comprises a series of lectures and a compulsory residential school in Rockhampton (25th - 28th Sep). The first day of the residential school will be run in the Rockhampton teaching laboratories, with the remainder of the residential school being run on North Keppel Island. Detailed information about the residential school tasks, equipment, and schedule will be provided on Moodle at the beginning of term.

The unit coordinator is Associate Professor Andrew Irving, who can be contacted via email (a.irving@cqu.edu.au), phone (07 4930 9013), or in person on the Rockhampton campus (CQIRP, Building 361, Room G.39).

## Assessment Tasks

### 1 Anthropogenic impacts on coastal seagrass communities

**Assessment Type**

Written Assessment

**Task Description**

Seagrasses thrive in sheltered estuaries and embayments that are also locations where humans like to build coastal ports, towns, and cities. Not surprisingly, seagrasses are often the first coastal communities to exhibit environmental impacts from coastal development. The DPSWR (Driver-Pressure-State-Welfare-Response) model has proved a useful decision tool for coastal resource managers.

Your task for this assessment is to construct a table that lists three different types of anthropogenic pressure on seagrass 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 seagrass communities (State change);
- describe how the change in state of the seagrass may influence human welfare (Welfare); and
- list the current management practices that are in use to mitigate the listed impacts (Response).

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 is the minimum expected for this assignment.

**Assessment Due Date**

Vacation Week Friday (17 Aug 2018) 11:45 pm AEST

Submission via Moodle

**Return Date to Students**

Week 7 Friday (31 Aug 2018)

Return via Moodle

**Weighting**

15%

**Minimum mark or grade**

40%

**Assessment Criteria**

Describe components of seagrass communities and ecosystem functions (30%)

Describe impacts of coastal development on seagrass communities (20%)

List management of seagrass 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%)

**Referencing Style**

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

**Submission**

Online

**Submission Instructions**

Please submit your work as MS Word (.doc or .docx) files. No pdf files.

**Learning Outcomes Assessed**

- Identify the main components and explain their development as discrete sub-systems.
- 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 an issue relating to coral reefs or kelp forests

### Assessment Type

Written Assessment

### Task Description

Write a media release based on an impact or management approach to coral reef or kelp forest resources that has been published in a recent scientific journal (2012 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”, your discovery will get greater exposure and lead you to fame and fortune!

Your task is to prepare a media release based on a recent (2012 – 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).

### Assessment Due Date

Week 9 Friday (14 Sept 2018) 11:45 pm AEST

Submission via Moodle

### Return Date to Students

Week 11 Friday (28 Sept 2018)

Return via Moodle

### Weighting

15%

### Minimum mark or grade

40%

### Assessment Criteria

Clear, informative, attention-grabbing title (2 marks out of 15)

Topic/issue clearly defined and explained (3 marks out of 15)

Clear summary of the scientific discovery (3 marks out of 15)

Clear summary of the application of new knowledge to enhanced management of habitat (3 marks out of 15)

Reference cited appropriately in the text and full citation provided below (1 mark out of 15)

Spelling and grammar (2 marks out of 15)

Adhering to word limit (1 mark out of 15)

Note: The word limit of 500 words will be strictly enforced.

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

### Referencing Style

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

### Submission

Online

### Submission Instructions

Please submit your work as MS Word (.doc or .docx) files. No pdf files.

### Learning Outcomes Assessed

- Identify the main components and explain their development as discrete sub-systems.
- 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



### 3 Poster presentation on an Australian fish species

**Assessment Type**

Written Assessment

**Task Description**

Construct a poster on one inshore or estuarine Australian fish species. The poster should consist of a concept diagram detailing the lifecycle of the fish species and identifying potential impacts on the breeding success of this species. Your poster should include details of the following:

- potential management strategies.
- impacts of coastal developments on species numbers and
- impacts of introduced species
- reproductive strategies,
- Role/s of the species in coastal ecosystem/s

**Assessment Due Date**

Week 12 Friday (5 Oct 2018) 11:45 pm AEST

Submission via Moodle

**Return Date to Students**

Exam Week Friday (19 Oct 2018)

Return via Moodle

**Weighting**

15%

**Minimum mark or grade**

40 %

**Assessment Criteria**

Assessment criteria:

- Relevance, comprehensiveness and accuracy of information (40%)
- Identification and critical analysis of impacts and management strategies (30%)
- Visual impact, organisation and readability of poster and conceptual diagrams (30%)

**Referencing Style**

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

**Submission**

Online

**Submission Instructions**

Please submit in either PDF or PowerPoint file format.

**Learning Outcomes Assessed**

- Identify the main components and explain their development as discrete sub-systems.
- 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
- Team Work
- Ethical practice

### 4 Brief written report based on the residential school

**Assessment Type**

In-class Test(s)

**Task Description**

The residential school will require you to synthesize information from a variety of sources and perspectives, ultimately aimed at addressing the question "Could we, and should we, build a tourist resort on North Keppel Island?" This assessment item will require you to prepare some answers based on this theme.

**Assessment Due Date**

Week 12 Friday (5 Oct 2018) 11:45 pm AEST

Submission via Moodle

**Return Date to Students**

Exam Week Friday (19 Oct 2018)

Return via Moodle

**Weighting**

5%

**Minimum mark or grade**

40 %

**Assessment Criteria**

Specific questions will be provided in the residential school guide, which will be made available on Moodle near the beginning of term. Marks will be allocated based on your ability to answer questions using synthesized information from multiple sources and perspectives.

**Referencing Style**

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

**Submission**

Online

**Submission Instructions**

Please submit your work as MS Word (.doc or .docx) files. No pdf files.

**Learning Outcomes Assessed**

- Sample and quantify representative components so they can interpret the dynamics of the system.
- Complete basic practical work in a safe and efficient manner.

## Examination

**Outline**

Complete an invigilated examination.

**Date**

During the examination period at a CQUniversity examination centre.

**Weighting**

50%

**Length**

180 minutes

**Minimum mark or grade**

45

**Exam Conditions**

Closed Book.

**Materials**

Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).

Calculator - non-programmable, no text retrieval, silent only

## 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