



MARN13007 Coastal Marine Resources

Term 2 - 2019

Profile information current as at 30/04/2024 10:00 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 - 2019

- 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 feedback In-person feedback

Feedback

Many students expressed their deep enjoyment of the residential school on North Keppel Island.

Recommendation

Retain the current residential school structure.

Feedback from Moodle feedback

Feedback

One student commented that they appreciated the diverse assessment types that were more reflective of tasks required in the 'real world' (e.g. media release, conference poster).

Recommendation

Retain the diversity of assessment types.

Feedback from Moodle feedback In-person feedback

Feedback

Some students expressed disappointment that they weren't able to SCUBA dive during the residential school.

Recommendation

While this option would be excellent, it is not feasible from an equity standpoint (not all students are trained or are capable of SCUBA diving), as well as an OH&S standpoint (neither CQU or the North Keppel Island Environment Education Centre have the policy in place to oversee SCUBA diving operations).

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



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	6
1 - Written Assessment - 15%	•	•		•	•	

Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	6
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

Schedule

Week 1 - 15 Jul 2019

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

Week 2 - 22 Jul 2019

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

Week 3 - 29 Jul 2019

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

Week 4 - 05 Aug 2019

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

Week 5 - 12 Aug 2019

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

Vacation Week - 19 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
		Anthropogenic impacts on coastal seagrass communities Due: Vacation Week Friday (23 Aug 2019) 11:45 pm AEST

Week 6 - 26 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
Managing impacts on coral reefs		
Week 7 - 02 Sep 2019		
Module/Topic	Chapter	Events and Submissions/Topic
Managing impacts on kelp forests		
Week 8 - 09 Sep 2019		
Module/Topic	Chapter	Events and Submissions/Topic
Inshore fisheries and fish stocks		Media release on an issue relating to coral reefs or kelp forests Due: Week 8 Friday (13 Sept 2019) 11:45 pm AEST
Week 9 - 16 Sep 2019		
Module/Topic	Chapter	Events and Submissions/Topic
Biology and habitat of inshore fisheries: Monitoring and management		
Week 10 - 23 Sep 2019		
Module/Topic	Chapter	Events and Submissions/Topic
RESIDENTIAL SCHOOL 24th - 27th September		
Week 11 - 30 Sep 2019		
Module/Topic	Chapter	Events and Submissions/Topic
Monitoring and management of inshore fisheries: impacts of dredging		
Week 12 - 07 Oct 2019		
Module/Topic	Chapter	Events and Submissions/Topic
Unit overview, Q&A		Scientific poster on an Australian fish species Due: Week 12 Friday (11 Oct 2019) 11:45 pm AEST
Review/Exam Week - 14 Oct 2019		
Module/Topic	Chapter	Events and Submissions/Topic
		Feasibility study based on residential school Due: Review/Exam Week Friday (18 Oct 2019) 11:45 pm AEST
Exam Week - 21 Oct 2019		
Module/Topic	Chapter	Events and Submissions/Topic

Term Specific Information

This unit comprises a series of lectures and a compulsory residential school in Rockhampton (24th - 27th 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 (23 Aug 2019) 11:45 pm AEST

Submission via Moodle

Return Date to Students

Week 7 Friday (6 Sept 2019)

Return via Moodle

Weighting

15%

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%)

The word length for this assignment is 1500 words.

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 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 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 research journal (2013 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 (2013 – 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 8 Friday (13 Sept 2019) 11:45 pm AEST

Submission via Moodle

Return Date to Students

Week 10 Friday (27 Sept 2019)

Return via Moodle

Weighting

15%

Assessment 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.

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

- 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 Scientific poster 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 identify 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,
- impacts of introduced species,
- reproductive strategies,
- roles of the species in coastal ecosystems.

You will not be required to formally present your poster (it will be submitted through Moodle to the examiner), but you should construct your poster as though it was for a scientific conference. As such, you'll need to balance content with aesthetics to make sure your poster is eye-catching but also informative. The word limit for this assessment is 1000 words.

Assessment Due Date

Week 12 Friday (11 Oct 2019) 11:45 pm AEST

Submission via Moodle

Return Date to Students

Exam Week Friday (25 Oct 2019)

Return via Moodle

Weighting

15%

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 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 Feasibility study based on residential school

Assessment Type

Report

Task Description

The residential school will require you to synthesize information from a variety of sources and perspectives, ultimately forming the basis for a feasibility study of a proposed new (hypothetical) tourist resort on North Keppel Island. You will be required 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 aspects to allow for the most informed decision to be made regarding the construction of a new resort. Additional helpful information on

writing your feasibility study will be provided in the residential school guide and on Moodle during term.

Assessment Due Date

Review/Exam Week Friday (18 Oct 2019) 11:45 pm AEST

Submission via Moodle

Return Date to Students

Exam Week Friday (25 Oct 2019)

Return via Moodle

Weighting

55%

Assessment Criteria

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

- Executive summary (5 %)
- Introduction (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 your work as MS Word (.doc or .docx) files. No pdf files.

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