



MARN13007 Coastal Marine Resources

Term 2 - 2017

Profile information current as at 01/05/2024 01:50 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 - 2017

- 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

Students were pleased with the move away from essays in favor of assessment items that required synthesis of multiple sources of information and presented in a range of ways.

Recommendation

Retain assessment structure for this part of the course.

Feedback from moodle

Feedback

One student suggested lectures be given by one person only through the course

Recommendation

While this would ensure consistency of delivery, it would come at a cost of exposure to different expertise and experiences, which would diminish the learning experience for the student.

Feedback from one-on-one feedback

Feedback

Students enjoyed the theme of the residential school ("Should we build a resort on North Keppel Island") as it forced them to draw from lessons and experiences across their degree, and the structure of the residential school encouraged them to "work it out as a team" rather than under direction of the staff.

Recommendation

Retain this approach to the residential school, but consider expanding the assessment tied to this (currently 5% of total grade) at the expense of the exam (50%) which is not an ideal tool to demonstrate the synthetic and applied knowledge of a final year student.

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%	•	•		•	•	

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

Judith Wake Unit Coordinator

j.wake@cqu.edu.au

Schedule

Week 1 - 10 Jul 2017

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

Week 2 - 17 Jul 2017

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

Week 3 - 24 Jul 2017

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

Week 4 - 31 Jul 2017

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

Week 5 - 07 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic
Biology of corals. How to build a coral reef in 4 easy steps		Anthropogenic impacts on coastal seagrass communities Due: Week 5 Friday (11 Aug 2017) 11:45 pm AEST

Vacation Week - 14 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic
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Week 6 - 21 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic
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Impacts and management of coral reefs.

Week 7 - 28 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic
Ecology of kelp forests. Impacts and management of kelp communities		

Week 8 - 04 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
Inshore fisheries and fish stocks		Media release on issue relating to coral reefs or kelp forests Due: Week 8 Friday (8 Sept 2017) 11:45 pm AEST

Week 9 - 11 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
Biology and habitat of inshore fisheries. Monitoring and management of inshore fisheries		

Week 10 - 18 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
Monitoring and management of inshore fisheries continued. Impacts of dredging Residential School		Residential School 19th to 22nd September: Rockhampton Campus & North Keppel Island

Week 11 - 25 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
Overview of management of coastal resources, and exam preparation		

Week 12 - 02 Oct 2017

Module/Topic	Chapter	Events and Submissions/Topic
Queen's Birthday Public Holiday		Poster presentation on an Australian fish species Due: Week 12 Friday (6 Oct 2017) 11:45 pm AEST Brief data report based on residential school Due: Week 12 Monday (2 Oct 2017) 11:45 pm AEST

Review/Exam Week - 09 Oct 2017

Module/Topic	Chapter	Events and Submissions/Topic
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Exam Week - 16 Oct 2017

Module/Topic	Chapter	Events and Submissions/Topic
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Term Specific Information

This unit comprises a series of lectures and a compulsory residential school in Rockhampton (19th - 22nd Sep). The first day of the residential school will be in the Rockhampton teaching laboratories, with the remainder of the residential school being on North Keppel Island. Detailed information about the residential school tasks, equipment, and schedule will be provided at the beginning of term via the Moodle site.

The unit coordinator is Associate Professor Andrew Irving, who can be reached via email (a.irving@cqu.edu.au), phone (07 4930 9013), or in person in Rockhampton (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

Week 5 Friday (11 Aug 2017) 11:45 pm AEST

Submission via Moodle

Return Date to Students

Week 7 Friday (1 Sept 2017)

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 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 (2011 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 (2011 – present) scientific journal article discussing environmental impacts or their management in either coral reefs or kelp forests. You are free to choose the type (i.e. natural vs anthropogenic) and scale (i.e. microscopic to global) of impact/management discovery, 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 recent 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 (8 Sept 2017) 11:45 pm AEST

Submission via Moodle

Return Date to Students

Week 10 Friday (22 Sept 2017)

Return via Moodle

Weighting

15%

Minimum mark or grade

40%

Assessment Criteria

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 (6 Oct 2017) 11:45 pm AEST

Submission via Moodle

Return Date to Students

Exam Week Friday (20 Oct 2017)

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

pdf format, Powerpoint

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 data report based on residential school

Assessment Type

In-class Test(s)

Task Description

Prepare a short (2 page) data report based on the information collected at the residential school.

Assessment Due Date

Week 12 Monday (2 Oct 2017) 11:45 pm AEST

Return Date to Students

Review/Exam Week Friday (13 Oct 2017)

Weighting

5%

Minimum mark or grade

40%

Assessment Criteria

A template for the data report will be provided on the moodle site. Your work will be assessed on:

- the presentation of the data (e.g. clarity, accuracy);
- your interpretation of the data (i.e. drawing conclusions); and
- relating the data to the broad aim of assessing the validity of a resort development on North Keppel Island

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

No calculators permitted

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

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