

### GEOS3220: Coastal Environments and Processes

Callaghan and Ourimbah  
Semester 1 - 2024



THE UNIVERSITY OF  
NEWCASTLE  
AUSTRALIA

## OVERVIEW

**Course Description** This course will introduce students to the study of coastal and marine geoscience. The major topics will include coastal environments and processes, coastal management, and field-based investigations. It aims to provide students with an understanding of the coast and the hazards and risks within coastal environments as well as how these issues impact on coastal management. The course will be structured around field trips, lectures, and laboratories.

**Academic Progress Requirements** Nil

**Assumed Knowledge** GEOS1040 or GEOS1050 or ENVS1001 or MARI1000 and GEOS2161.

**Contact Hours**

**Callaghan**  
**Field Study**  
Face to Face Off Campus  
56 hour(s) per term  
This includes field laboratories and computer laboratories conducted during an intensive field trip.  
**Lecture**  
Face to Face Off Campus  
10 hour(s) per term  
Lectures will be held during the field trip  
**Online Activity**  
Online  
22 hour(s) per term  
The field study (inc labs and lectures) and some online learning exercises will be run in February prior to the start of semester 1. Students will need to make themselves available during this time in order to complete the course.

**Ourimbah**  
**Field Study**  
Face to Face Off Campus  
56 hour(s) per term  
This includes field laboratories and computer laboratories conducted during an intensive field trip.  
**Lecture**  
Face to Face Off Campus  
10 hour(s) per term  
Lectures will be held during the field trip  
**Online Activity**  
Online  
22 hour(s) per term  
The field study (inc labs and lectures) and some online learning exercises will be run in February prior to the start of semester 1. Students will need to make themselves available during this time in order to complete the course.

**Unit Weighting** 10

# COURSE OUTLINE

[www.newcastle.edu.au](http://www.newcastle.edu.au)  
CRICOS Provider 00109J

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<b>Workload</b>	Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.
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## CONTACTS

<b>Course Coordinator</b>	<b>Callaghan and Ourimbah</b> A/Pr Hannah Power <a href="mailto:Hannah.Power@newcastle.edu.au">Hannah.Power@newcastle.edu.au</a> (02) 4921 5606 Consultation: By appointment.
<b>Teaching Staff</b>	Other teaching staff will be advised on the course Canvas site.
<b>School Office</b>	<b>School of Environmental and Life Sciences</b> Room C228 Chemistry Building Callaghan <a href="mailto:Science-SELS@newcastle.edu.au">Science-SELS@newcastle.edu.au</a> +61 2 4921 5080 9am-5pm (Mon-Fri) <b>School of Environmental and Life Sciences</b> SO-104 / SO-105 Science Offices OURIMBAH <a href="mailto:Science-SELS@newcastle.edu.au">Science-SELS@newcastle.edu.au</a> 4349 4568 / 4348 4115 9am-5pm (Mon-Fri)

## SYLLABUS

**Course Content** GEOS3220 covers the advanced components of coastal geomorphology, oceanography, and coastal management. Topics covered in the course will include:

1. An understanding of the coastal region in the broader global oceanographic context.
2. The geomorphological components of the coastal zone including beach-dune-barrier, estuarine, delta, and coral reef systems.
3. The key processes relevant to coastal systems and the importance of the processes in shaping the geomorphology.
4. The basic principles of coastal management, causes of the need for coastal management, and basic management techniques.
5. Links between the geomorphology and the processes in a morphodynamic context.
6. Methods and techniques used to collect, analyse, and interpret field and experimental data in the coastal zone.

In order to participate in this course, students must complete a compulsory Workplace Health and Safety requirement. Students will receive full information on this compulsory course component in the course outline provided by the School. This course also has a compulsory field component that is run in February, prior to the start of Semester 1. The field trip requires an up-front fee not covered by HECS that may vary with each offering of the course. Interested students should contact the School of Environmental and Life Sciences for more information.

<b>Course Learning Outcomes</b>	<b>On successful completion of this course, students will be able to:</b> <ol style="list-style-type: none"><li>1. Identify and interpret the geomorphological features present in coastal environments;</li><li>2. Describe the processes relevant to coastal environments and assess how the processes shape the geomorphology;</li><li>3. Explain and apply principles of, and techniques used in coastal management;</li><li>4. Collect, analyse, and interpret field and experimental data from the coastal zone;</li><li>5. Use team-based skills including problem solving and critical thinking to collect and collate data, obtain research outcomes and conclusions;</li><li>6. Communicate effectively in both oral and written forms.</li></ol>
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<b>Course Materials</b>	<b>Other Resources:</b> <ul style="list-style-type: none"><li>- All course materials will be provided via the Canvas site.</li></ul>
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# SCHEDULE

Week	Week Begins	Topic	Learning Activity	Assessment Due
	29 Jan		Complete Online Learning Modules 1 & 2	Quizzes on Online Learning Modules 1 & 2
	5 Feb	Field trip (commences 9 Feb)	Complete Online Learning Modules 3, 4, 5, & 6	Quizzes on Online Learning Modules 3, 4, 5, & 6 Poster submission online
	12 Feb	Field trip (concludes 15 Feb)		Poster presentation Field notebook
	19 Feb		Complete Online Learning Module 7	
1	26 Feb		Complete Online Learning Module 7	Quiz on Online Learning Module 7
2	8 Mar		Complete Online Learning Module 8	Field Report 1
3	11 Mar		Complete Online Learning Module 8	Quiz on Online Learning Module 8
4	18 Mar		Complete Online Learning Module 9	
5	25 Mar		Complete Online Learning Module 9	Quiz on Online Learning Module 9
6	1 Apr		Complete Online Learning Module 10	
7	8 Apr		Complete Online Learning Module 10	Quiz on Online Learning Module 10
<b>Mid-Semester Recess</b>				
<b>Mid-Semester Recess</b>				
8	29 Apr			Field Report 2
9	6 May			
10	13 May			
11	20 May			
12	27 May			
13	3 Jun			
<b>Examination Period</b>				
<b>Examination Period</b>				

# ASSESSMENTS

This course has 5 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Poster Presentation	4pm Thursday 8 February	Group	15%	1, 2, 3, 5, 6
2	Quizzes - Class	Various. Further details will be provided via Canvas (or Course Schedule above).	Individual	15%	1, 2, 3
3	Field Report 1	4pm Friday 8 March	Individual	25%	1, 2, 3, 4, 6
4	Field Report 2	4pm Monday 29 April	Individual	30%	1, 2, 3, 4, 6
5	Field Notebook	12pm Thursday 15 February	Individual	15%	1, 2, 4, 5, 6

## Late Submissions

The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

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## Assessment 1 - Poster Presentation

<b>Assessment Type</b>	Exhibition / Poster
<b>Description</b>	Poster and presentation on a topic related to coastal environments and processes. Further details will be provided via Canvas.
<b>Weighting</b>	15%
<b>Due Date</b>	4pm Thursday 8 February
<b>Submission Method</b>	In Class Online Submit to Canvas by due date above and present poster at a poster session held during the field trip.
<b>Assessment Criteria</b>	This assessment covers Learning Outcomes 1, 2, 3, 5, and 6. A marking rubric will be made available to you in the course manual.
<b>Return Method</b>	In Class
<b>Feedback Provided</b>	In Class - Verbal feedback will be given in the poster session during the field trip. Marks will be made available via Canvas

## Assessment 2 - Quizzes - Class

<b>Assessment Type</b>	Quiz
<b>Description</b>	Online quizzes on material covered in the Online Learning Modules.
<b>Weighting</b>	15%
<b>Due Date</b>	Various. Further details will be provided via Canvas (or Course Schedule above).
<b>Submission Method</b>	Online Quizzes will be conducted online in Canvas.
<b>Assessment Criteria</b>	This assessment covers Learning Outcomes 1, 2, and 3.
<b>Return Method</b>	Online
<b>Feedback Provided</b>	Online - Feedback will be provided via Canvas within 15 working days from submission. Marks will be made available via Canvas.

## Assessment 3 - Field Report 1

<b>Assessment Type</b>	Report
<b>Description</b>	Written assignment detailing a subset of the results from the field trip. Further details will be provided during the field trip.
<b>Weighting</b>	25%
<b>Due Date</b>	4pm Friday 8 March
<b>Submission Method</b>	Online Submit assessment on Course Canvas site.
<b>Assessment Criteria</b>	This assessment covers Learning Outcomes 1, 2, 3, 4, 5, and 6. A marking rubric will be made available to you in the course manual.
<b>Return Method</b>	Online
<b>Feedback Provided</b>	Online - Individual feedback will be provided when the assessment is returned, which will be within 15 working days from submission. Marks will be made available via Canvas.

## Assessment 4 - Field Report 2

<b>Assessment Type</b>	Written Assignment
<b>Description</b>	Written assignment detailing a subset of the results from the field trip. Further details will be provided during the field trip.
<b>Weighting</b>	30%
<b>Due Date</b>	4pm Monday 29 April
<b>Submission Method</b>	Online Submit assessment on Course Canvas site.
<b>Assessment Criteria</b>	This assessment covers Learning Outcomes 1, 2, 3, 4, 5, and 6. A marking rubric will be made available to you in the course manual.
<b>Return Method</b>	Online
<b>Feedback Provided</b>	Online - Individual feedback will be provided when the assessment is returned, which will be within 15 working days from submission. Marks will be made available via Canvas.

## Assessment 5 - Field Notebook

<b>Assessment Type</b>	Log / Workbook
<b>Description</b>	Field notebook containing notes completed during the field trip.
<b>Weighting</b>	15%
<b>Due Date</b>	12pm Thursday 15 February
<b>Submission Method</b>	In Class Submit to staff at the end of the field trip.
<b>Assessment Criteria</b>	This assessment covers Learning Outcomes 1, 2, 3, 4, 5, and 6. A marking rubric will be made available to you in the course manual.
<b>Return Method</b>	In Person
<b>Feedback Provided</b>	Returned Work - Individual feedback will be provided when the assessment is returned, which will be within 15 working days from submission. Marks will be made available via Canvas.

## ADDITIONAL INFORMATION

### Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

\*Skills are those identified for the purposes of assessment task(s).

### Communication Methods

Communication methods used in this course include:

- Canvas Course Site: Students will receive communications via the posting of content or announcements on the Canvas course site.
- Email: Students will receive communications via their student email account.
- Face to Face: Communication will be provided via face to face meetings or supervision.

### Course Evaluation

Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.

### Oral Interviews (Vivas)

As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the [Oral Examination \(viva\) Procedure](#). In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the [Student Conduct Rule](#).

**Academic Misconduct** All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to <https://policies.newcastle.edu.au/document/view-current.php?id=35>.

**Adverse Circumstances** The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where:

1. the assessment item is a major assessment item; or
2. the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system;
3. you are requesting a change of placement; or
4. the course has a compulsory attendance requirement.

Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at:  
<https://policies.newcastle.edu.au/document/view-current.php?id=236>

**Important Policy Information** The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at <https://www.newcastle.edu.au/current-students/respect-at-uni/policies-and-procedures> that support a safe and respectful environment at the University.

*This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.*

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