

# FACULTY OF SCIENCE SCHOOL OF BIOLOGICAL, EARTH AND ENVIRONMENTAL SCIENCES



# GEOS 3921 COASTAL RESOURCE MANAGEMENT

TRIMESTER 3, 2022

# **Table of Contents**

1. Information about the Course	2
2. Staff Involved in the Course	2
3. Course Details	
Assessment: written reports, class participation	3
4. Rationale and Strategies Underpinning the Course	
5. Course Schedule	5
6. Assessment Tasks and Feedback	<del>(</del>
7. Additional Resources and Support	8
8. Required Equipment, Training and Enabling Skills	8
9. Course Evaluation and Development	9
10. Administration Matters	
11. UNSW Academic Honesty and Plagiarism	12

# **Faculty of Science - Course Outline**

## 1. Information about the Course

NB: Some of this information is available on the <u>UNSW Handbook</u><sup>1</sup>

Year of Delivery	2022	2022						
Course Code	GEOS 3921	GEOS 3921						
Course Name	COASTAL RESO	COASTAL RESOURCE MANAGEMENT						
Academic Unit	BEES	BEES						
Level of Course	3 <sup>rd</sup> Year undergra	duate course						
Units of Credit	6 units of credit							
Session(s) Offered	Trimester 3							
Assumed Knowledge, Prerequisites or Co- requisites	Nil							
Hours per Week	Tutorials: 5 x 2 ho	Lectures: 2 hours per week - each lecture is pre-recorded  Tutorials: 5 x 2 hour – Not run each week to enable you to work on major assignment;  refer to the course schedule						
Number of Weeks	10 weeks	<u> </u>						
Commencement Date	Week 1. Tuesday	Week 1, Tuesday 13 <sup>th</sup> September						
Summary of Course Stru	ıcture (for details s	ee 'Course Schedul	e')					
Summary of Course Stru	ecture (for details s	ee 'Course Schedule	Day	Location				
Component Lectures	HPW 2	Time Pre-recorded	Posted early each week (wk 1-5, 7-10)	Precorded				
Component	HPW	Time	Day Posted early each week					
Component Lectures Seminar – only in Week 10!	#PW 2 2 2	Time Pre-recorded	Posted early each week (wk 1-5, 7-10)	Precorded				
Component Lectures Seminar – only in Week 10! Tutorial classes	HPW 2	Time Pre-recorded 11 am – 1 pm	Posted early each week (wk 1-5, 7-10) Thursday (wk 10 only)	Precorded Precorded				
Component  Lectures  Seminar – only in Week 10!	#PW 2 2 2	Time Pre-recorded	Posted early each week (wk 1-5, 7-10)	Precorded				
Component Lectures Seminar – only in Week 10! Tutorial classes Tutorial – Option 1	#PW 2 2 2	Time Pre-recorded 11 am – 1 pm  11 am – 1 pm	Posted early each week (wk 1-5, 7-10) Thursday (wk 10 only) Tuesday	Precorded Precorded  Mathews 107				

## 2. Staff Involved in the Course

Staff	Role	Name	Contact Details	Consultation Times
Course Convenor		A/Prof Jes Sammut	0403154863 <u>j.sammut@unsw.edu.au</u> Skype: Jesmond1965	By appointment, please send an email to schedule a time.
Additional Teaching Staff	Lecturers & Facilitators	Jes Sammut & Grace Nye- Butler	g.nye-butler@unsw.edu.au	By appointment

2

<sup>&</sup>lt;sup>1</sup> UNSW Online Handbook: <a href="http://www.handbook.unsw.edu.au">http://www.handbook.unsw.edu.au</a>

## 3. Course Details

Course Description2 (Handbook Entry)	This course focuses on coastal resource management. Topics include: Australian coastal zone policy; coastal erosion and conservation; coastal soil and water acidification; global shrimp farming issues and management; oyster farming; causes of fish kills and fish disease outbreaks; estuary management; coastal water resource management; recreational and commercial fisheries; marine protected areas (MPAs); coastal wetlands. The course considers Australian and global perspectives on current and emerging coastal resource management issues.  This course is intended to give students from various disciplines an opportunity to
Course Aims3	increase their understanding of current and emerging issues in coastal resource management as well as approaches to management and coastal planning in Australia and the region. This course was also developed to meet job market needs in coastal resource management.
Student Learning Outcomes4	At the successful completion of this course, students should be able to:  1. Understand processes that affect coastal degradation, including human impacts on coastal areas  2. Understand and apply coastal policy, frameworks, and commonly used approaches to coastal resource management  3. Discuss the broad and emerging issues that relate to coastal resource management  4. Understand the roles of geography, environmental science, social science and engineering in coastal resource management  5. Understand and apply interdisciplinary approaches to coastal resource management  On successful completion of this course, you will have developed skills in:  - professional report production  - project planning and management  - data collection, interpretation and analyses (depending on assessment choices)  - delivery and communication of findings  - stakeholder engagement  - reviewing policy, reports and management strategies  - formulating management strategies

## Graduate Attributes Developed in this Course<sup>5</sup>

Science Graduate Attributes <sup>5</sup>	Select the level of FOCUS 0 = NO FOCUS 1 = MINIMAL 2 = MINOR 3 = MAJOR	Activities / Assessment
Research, inquiry and analytical thinking abilities	3	Activities: written report, real-life type investigative project Assessment: written reports
Capability and motivation for intellectual development	2	Activities: written report, field trips, real-life type investigative project Assessment: written reports, class participation
Ethical, social and professional understanding	1	Activities: written report, field trips, real-life type investigative project, case studies, round table role-play Assessment: written reports, class participation
Communication	2	Activities: written report, real-life type investigative project, case studies, round table role-play Assessment: written reports, class participation
Teamwork, collaborative and management skills	3	Activities: written report, real-life type investigative project, case studies, round table role-play Assessment: class participation
Information literacy	3	Activities: written report, real-life type investigative project, case studies, round table role-play

UNSW Handbook: <a href="http://www.handbook.unsw.edu.au">http://www.handbook.unsw.edu.au</a>
 Learning and Teaching Unit: Course Outlines
 Learning and Teaching Unit: Learning Outcomes
 Contextualised Science Graduate Attributes: <a href="http://www.science.unsw.edu.au/our-faculty/science-graduate-attributes">http://www.science.unsw.edu.au/our-faculty/science-graduate-attributes</a>

	Assessment: written reports
Major Topics (Syllabus Outline)	The major topics that this course will cover include some of the most well-known and emerging coastal issues, threats and pressures in Australia and the region such as soil and water acidification, the commercial fishing industry, shrimp farming, 'natural' disasters and climate change. This course will also examine coastal policy in Australia, the issues surrounding marine parks and the challenges associated with managing the Australian coast.
Relationship to Other Courses within the Program	Coastal Resource Management follows on from Environmental Impact Assessment where there was a strong vocational emphasis. Likewise, the material in Coastal Resource Management is also directed towards improving professional skills and will enable students to understand how government agencies, industry and the community participate in coastal resource assessment, planning and management.

# 4. Rationale and Strategies Underpinning the Course

Teaching Strategies	The material in this course is taught through a mixture of lectures, tutorials, field classes (most likely videos because of the pandemic) and participation in a round table discussion. This mixture of teaching methodologies will be employed to ensure that there are various avenues for students to interact, communicate and learn at various levels of the course.
Rationale for learning and teaching in this course <sup>6,7</sup>	The lecture content for this course is designed to enable students to critically study and understand current and emerging issues in coastal resource management. The majority of the course will be taught with a geographical perspective in mind. By providing different geographical perspectives and approaches it is hoped that students will develop a greater understanding of the connections between coastal physical processes and human dimensions to coastal protection and management. This course will draw on case studies in both Australia and in the Asia Pacific region to provide students with an additional level of understanding of such relationships and connections.

4

<sup>&</sup>lt;sup>6</sup>Reflecting on your teaching

## 5. Course Schedule

Some of this information is available on the Online Handbook<sup>7</sup> and the UNSW Timetable<sup>8</sup>.

Week	Lecture topics	Lecturer	Tutorial class	Assignment (see also 'Assessment Tasks & Feedback' for submission dates)	
Week 1 12 Sept	Introduction- course overview and Estuary classification	Jes	No tutorial	VERY BRIEF report for SWOT analysis submitted for assessment (10%)	
Week 2 19 Sept	Dune and beach management	Jes	SWOT analysis	La Perouse briefing note (15%)	
Week 3 26 Sept	CASE STUDY: Acid sulfate soils	Jes	La Perouse field trip		
Week 4 3 Oct	Costal resource conflicts, management, ideology and the role of science and government  Q&A session	Jes	No tutorial	Brief: Preparation for Round Table (15%)	
Week 5 10 Oct	Aquaculture case studies (shrimp, oyster and fish farming)	Jes	Environmental round table	Round table contribution (10%)	
Week 6 17 Oct	FLEX	I WEEK - NO CL	ASSES (enjoy the coast!)		
Week 7 24 Oct	Marine parks, policy and science	Grace	No tutorial	Project proposal submitted – PART A MAJOR PROJECT (20%)	
Week 8 31 Oct	Coastal vegetation communities & wetlands	Jes	Tutorial – mixed activities; to be discussed with class early in the course		
Week 9 7 Nov	Paradigms of management	Jes	No tutorial		
Week 10 14 Nov	Recreational & Commercial Fishing	Jes & Grace	Final project presentations in tutorial class	Final project submitted – PART B MAJOR ASSIGNMENT (30% including project & presentation grade)	
Course review and career advice (Thursday Seminar - online)			Glass	Presentations in class	

<sup>&</sup>lt;sup>7</sup> UNSW Virtual Handbook: <a href="http://www.handbook.unsw.edu.au">http://www.handbook.unsw.edu.au</a></a>
<a href="http://www.timetable.unsw.edu.au/">http://www.timetable.unsw.edu.au/</a>

## 6. Assessment Tasks and Feedback

Task	Knowledge & abilities	Assessment Criteria	% of	Date	e of		Feedback	
	assessed		total mark	Release	Submission	WHO	WHEN	HOW
Week 1 report and Week 2 Tutorial class SWOT Analysis	Knowledge of SWOT analysis and its application to a coastal industry	Demonstrated understanding of SWOT analyses, appropriate application of the technique to a coastal industry.	10%	Week 1	Week 1 MIDNIGHT Friday  It is a very BRIEF assignment, so don't stress!	Grace & Jes	End of Week 2	Online feedback via Turn-it-in
Briefing note - La Perouse field trip	Knowledge of significant environmental heritage of La Perouse, ability to prepare a briefing note	Briefing notes are assessed on structure, research effort, accuracy of information, clear and concise written expression.	15%	Week 1	Week 2 MIDNIGHT Friday	Grace & Jes	Week 3	Online feedback via Turn-it-in
Tutorial class Environmental Round Table + briefing note	Knowledge of issue under discussion, ability to present a viewpoint for discussion, ability to engage with other stakeholders. Ability to coordinate with group partner and prepare for discussion using wiki page.	Working in groups and coordinating preparation. Participation in discussion, willingness to engage with other stakeholders	25%	Groups will be formed in the Week 2 tutorial classes	Week 4 MIDNIGHT Friday for briefing notes  Week 5 tutorial class participation – round table discussion.	Grace & Jes	Week 7	Grade will be made available online
Major project Part A: Project proposal	Knowledge of coastal resource management issue, ability to research and summarise information, ability to meet project deadlines.	Assignments will be assessed upon research effort, accuracy of information, clear and concise written expression.	20%	Week 1	Week 7 MIDNIGHT Tuesday (not Friday)	Grace & Jes	Early Week 9	Online feedback via Turn-it-in

Major project Part B:	Knowledge of a coastal	Assignments will be	30%	Week 1	Week 10 -	Grace &	End of Week	Online
Final project	resource management issue,	assessed upon clear			MIDNIGHT	Jes	11	feedback
	ability to prepare a	articulation of			Friday			
	management plan or a	management issues,						via Turn-it-in
	communication document,	accuracy of science						
	ability to meet project	content, identification of						THERE IS NO
	deadlines, ability to apply	appropriate						EXAM –
	knowledge in a real-world	management/						Yippee!
	scenario, ability to respond	communication						
	to constructive feedback.	strategies, clear						
		description of						
		management						
		actions/effective creative						
		use of communication						
		tool						

# Field trips:

- La Perouse during Tuesday Tutorial time
   Randwick Environment Park virtual field trip. More information provided on class

7

<sup>&</sup>lt;sup>90</sup> Approaches to assessment: <a href="http://teaching.unsw.edu.au/assessment">http://teaching.unsw.edu.au/assessment</a>

<sup>12</sup> UNSW OHS Home page

# 7. Additional Resources and Support

Text Books	There is no set text for this course. However, the following book may be useful: Harvey, N. and Caton, B. (2010) <i>Coastal Management in Australia</i> . Oxford University Press, South Melbourne. Available online as a free e-book, there is a link on the Moodle course page.  A text that students find useful for completing geography assignments is:
	Hay, I. (1996) Communicating in Geography and the Environmental Sciences, Oxford University Press, Melbourne.
Course Manual	The lecture content is available on the UNSW Moodle course pages. Students enrolled in GEOS 3921 will automatically have access to the Moodle resources for this course. Links to relevant readings and journals have been provided. Additional readings will be recommended throughout the course.
Required Readings	Literature search skills are a necessary job requirement and you are encouraged to hone your skills. Third year students should have sufficient experience to efficiently seek out supporting references. It is your responsibility to conduct literature searches in advance of the tutorial classes. However, a list of recommended readings and internet sites is provided in the lectures and on the Moodle course pages.
Additional Readings	See above
Recommended Internet Sites	NSW Planning, Industry & Development (coastal management) - https://www.planning.nsw.gov.au/policy-and-legislation/coastal-management

# 8. Required Equipment, Training and Enabling Skills

Equipment Required	Nil
Enabling Skills Training Required to Complete this Course	Nil

# 9. Course Evaluation and Development

Student feedback is gathered periodically by various means. Such feedback is considered carefully with a view to acting on it constructively wherever possible. This course outline conveys how feedback has helped to shape and develop this course.

Mechanisms of Review	Last Review Date	Comments or Changes Resulting from Reviews
Major Course Review	An exam is no longer held in this course to reduce student workload a enable students to focus on assessment skills that are more related to skill development.	
	A second fieldtrip was added in 2011 in response to s  Alumni commonly report that this course, along with EIA, I their first career-related jobs. Past students have been em consultancies, government agencies, non-government age development agencies.	
		Quotes from past students:
		"My employer said I got the job because at the interview I had a good understanding of resource management from different stakeholder perspectives. They were impressed when I talked about De Jure and De facto management. I think it gave me the edge over the other applicants."
		"My supervisor asked me to do a SWOT Analysis. I surprised her when I got it done quicker than she expected."
		"The communicating science assignment was part of my job application portfolio and it really impressed the interview panel when I showed it to them. They asked if I did a double degree that included design!"
		"My communicating science assignment was published by Council and it got sponsored."
		"I liked the course so much that I am going to take a break from Environmental Law and do development work overseas." (and they did)
		"Hey, I am working as an Environmental Education Officer and loving it. CRM was a great primer for the job."
		"It matters a lot that the lecturer cares about our career planning. I found my path through CRM. I learned a lot about the "people" part of resource management after years learning about environmental processes. I don't have to be a lab rat to stay in the science space."
		"I've been working on acid sulfate soil management for the Council and helped to amend their LEP. I still use my CRM class notes © "
		"The course inspired me to do a Masters Degree in development work. I scored a year's assignment in Indonesia working with an NGO and I am going to then enroll in the postgraduate degree."
		"I can't walk past a fish shop now without stopping to see what they sell, where it came from, whether the prawns look fresh and if the shop is incorrectly labeling fish! Thanks Jesyou ruined my appetite for prawns!"
		"Until I did this course, I wasn't really sure what I was going to do with my degree. By the end of the course I felt a lot more confident on where I could get a job and the kind of job I wanted."
		"Jes was a great help during and after the course. I didn't worry about the "experience in" wording of the job advert after CRM. I HAD EXPERIENCE because of the course and EIA

too. I got a job quickly using CRM and EIA to make my pitch. I also used my major project and briefing notes as examples of what I can do."

"I wrote a successful grant application. Woo hoo! The ACIAR template you gave me for the assignment was such a big help."

"Thanks! I'm seeing through the career planning fog after this course. Heel clicks – coastal management, here I come!"

"I got involved in a local fish kill investigation. I used what I learnt to get them to change how they were going to assess the fish kill. They would have blamed it on something else if I hadn't told them what they should consider."

#### 10. Administration Matters

### **Expectations of Students**

Students must attend eighty percent of their classes. If you will miss a tutorial class, you must advise Jes before class. Attending less than 80% may result in penalties.

Students usually must attend the La Perouse field trip during this course. However, given the COVID-19 situation, a back up video will be made available if the fieldtrip has to be cancelled. Overseas-based students can watch the video as an alternative.

Plagiarism or cheating will not be tolerated. You must read UNSW policy on plagiarism.

Students must come prepared to tutorials.

Acceptable Use of UNSW Information and Communication Technology Resources <a href="https://my.unsw.edu.au/student/resources/ComputingCommunicationRule.html">https://my.unsw.edu.au/student/resources/ComputingCommunicationRule.html</a>

Unless it is a requisite component of a course of study and has the approval of the relevant lecturer or supervisor, UNSW facilities are not to be used for:

- the deliberate or negligent preparing, storing, displaying of racist, pornographic or other offensive material,
- the deliberate receiving or transmitting of racist, pornographic or other offensive material.

UNSW facilities are not to be used to harass any person (whether within or outside the University) or interfere with their work. Examples of breaches to this rule could include the sending of obscene, abusive, fraudulent, threatening or repetitive messages, as well as unsolicited non-University work-related e-mail.

#### **Assignment Submissions**

All assignments for this course are submitted using Turn-it-in on the Moodle course page. Your work will not be assessed until the electronic version is received. You are expected to make a back-up copy of everything you hand-in. Once you submit your work, you cannot withdraw it and resubmit, so please submit the correct file.

Late work will be penalised by 5% of the value of the assignment per day unless an extension is provided for valid reasons that are supported (e.g. via a medical certificate). After 5 days students cannot submit the assignment and will receive 0% for that piece of assessment. This is UNSW policy.

Occupational Health and Safety <sup>12</sup> Assessment Procedures  UNSW Assessment Policy <sup>13</sup>	The following links provide information on relevant Occupational Health and Safety policies and expectations at UNSW <a href="http://www.ohs.unsw.edu.au/hs riskmanagement/index.html">http://www.ohs.unsw.edu.au/hs riskmanagement/index.html</a> , and in the school of BEES <a href="http://safety.unsw.edu.au/">http://safety.unsw.edu.au/</a> A detailed safety briefing will take place before the class field trip.  Student achievement in this course is assessed by assignment submission and class participation/attendance. ALL assessment must be completed and an overall combined grade of 50% must be achieved to pass this course.  There is no final exam for this course.  Students may apply for special consideration when they have been affected by illness, follow the procedure at the website below; <a href="https://student.unsw.edu.au/special-consideration">https://student.unsw.edu.au/special-consideration</a> Please do not ask course staff for an extension — you must formally apply for special consideration.				
Equity and Diversity	Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course Convenor prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equity and Diversity Unit (9385 4734 or <a href="http://www.studentequity.unsw.edu.au/">http://www.studentequity.unsw.edu.au/</a> ).  Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.				
Student Complaint Procedure <sup>14</sup>	In the first instance, you should raise issues with your lecturers and tutor. Most issues can be resolved quickly if you make staff aware.  A/Prof Scott Mooney is the School's Grievance Officer.  https://www.bees.unsw.edu.au/scott-mooney	A/Prof Julian Cox Associate Dean (Education) julian.cox@unsw.edu.au Tel: 9385 8574  Or  Dr Gavin Edwards Associate Dean (Undergraduate Programs) g.edwards@unsw.edu.au Tel: 9385 8063	Student Conduct and Appeals Officer (SCAO) within the Office of the Pro-Vice-Chancellor (Students) and Registrar.  email studentcomplaints@unsw.edu.au  University Counselling and Psychological Services <sup>10</sup>		

<sup>13</sup> UNSW Assessment Policy
14 Student Complaint Procedure
15 University Counselling and Psychological Services

### 11. UNSW Academic Honesty and Plagiarism

#### PLEASE READ THIS SECTION BEFORE YOU COMMENCE ANY ASSIGNMENTS

#### What is Plagiarism?

Plagiarism is the presentation of the thoughts or work of another as one's own. \*Examples include:

- direct duplication of the thoughts or work of another, including by copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person's assignment without appropriate acknowledgement;
- paraphrasing another person's work with very minor changes keeping the meaning, form and/or progression of ideas of the original;
- piecing together sections of the work of others into a new whole;
- presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and
- claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.†

For the purposes of this policy, submitting an assessment item that has already been submitted for academic credit elsewhere may be considered plagiarism.

Knowingly permitting your work to be copied by another student may also be considered to be plagiarism.

Note that an assessment item produced in oral, not written, form, or involving live presentation, may similarly contain plagiarised material.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does *not* amount to plagiarism.

The Learning Centre website is main repository for resources for staff and students on plagiarism and academic honesty. These resources can be located via:

#### http://www.student.unsw.edu.au/plagiarism

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:

- correct referencing practices;
- paraphrasing, summarising, essay writing, and time management;
- appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre.

Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

† Adapted with kind permission from the University of Melbourne

<sup>\*</sup> Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle