UNSW Course Outline

ZPEM2405 Special Topic in Physics and Oceanography 2 - 2024

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General Course Information

Course Code : ZPEM2405
Year : 2024
Term : Semester 2
Teaching Period : Z2
Is a multi-term course? : No
Faculty : UNSW Canberra
Academic Unit : UC Science
Delivery Mode : In Person
Delivery Format : Standard
Delivery Location : UNSW Canberra at ADFA
Campus : UNSW Canberra
Study Level : Undergraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

Coastal oceanography studies ocean dynamics processes including wave-current Interactions, estuarine circulations, coastal responses to anthropogenic activities, and sediment dynamics and its effect on biogeochemical Processes.

In this 6UOC course we will investigate fundamental aspects of coastal oceanography - Dynamic response of coasts and estuaries to human impacts.

Topics covered include:

1. Introduction to coastal oceanography
2. Dyke and seawall construction
3. Island building
4. Tidal flat reclamation
5. Port construction
6. Marine plastic debris tracking and their fate

Course Aims

This course aims to achieve the following:

- a good understanding of the coastal oceanography concepts studied in the course, and relating to that knowledge to real case studies;
- an ability to solve relevant coastal oceanographic problems; and
- an ability to present, analyse, and lead discussion of, coastal oceanography concepts.

Relationship to Other Courses

ZPEM2405 Special Topic in Physics and Oceanography 2 is a Level 2 Oceanography course for a major in Oceanography. ZPEM2401 Australian Waters and their Dynamics is the prerequisit of the course.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Demonstrate a good understanding of the coastal oceanography concepts studied in the course, and be able to relate that knowledge to real case studies
CLO2 : Solve relevant coastal oceanographic problems
CLO3 : Present (written), analyse, and lead discussion of, coastal oceanography concepts.

Course Learning Outcomes	Assessment Item
CLO1 : Demonstrate a good understanding of the coastal oceanography concepts studied in the course, and be able to relate that knowledge to real case studies	• Four summary reports • Final Report
CLO2 : Solve relevant coastal oceanographic problems	• Four summary reports • Final Report
CLO3 : Present (written), analyse, and lead discussion of, coastal oceanography concepts.	• Four summary reports • Final Report

Learning and Teaching Technologies

Moodle - Learning Management System | Echo 360

Learning and Teaching in this course

Required Textbooks:

Lecture notes and papers will be provided throughout the course.

Equipment:

A scientific calculator without stored memory is required for this course. No programmable calculators will be permitted in the tests and in the examination. I recommend that you use a scientific calculator in all classes, to gain confidence and experience with it.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Four summary reports Assessment Format: Individual	60%	
Final Report Assessment Format: Individual	40%	

Assessment Details
Four summary reports

<u>Assessment Overview</u>

Summary reports (four reports total, each worth 15 % for a total of 60 %) – no more than 4 page summary of the previous 3 weeks discussion, due every Monday at three weeks intervals starting in week 4.

<u>Course Learning Outcomes</u>

- CLO1 : Demonstrate a good understanding of the coastal oceanography concepts studied in the course, and be able to relate that knowledge to real case studies
- CLO2 : Solve relevant coastal oceanographic problems
- CLO3 : Present (written), analyse, and lead discussion of, coastal oceanography concepts.

Final Report

<u>Assessment Overview</u>

Final summative assessment during exam period covering the breadth of the course. No more than 15 pages synthesizing the summaries.

<u>Course Learning Outcomes</u>

- CLO1 : Demonstrate a good understanding of the coastal oceanography concepts studied in the course, and be able to relate that knowledge to real case studies
- CLO2 : Solve relevant coastal oceanographic problems
- CLO3 : Present (written), analyse, and lead discussion of, coastal oceanography concepts.

General Assessment Information

1. <u>summary reports</u> four reports/presentations total, each worth 15 % (10% report and 5% presentation) for a total of 60% – presentation will be conducted in labs in weeks 3, 6, 9 and 12; and written report no more than 8-10 pages in double space (4-5 pages in single space) using Times New Roman with size of 12, summarising the previous 3 weeks discussion, due every Monday at three weeks intervals starting in week 4;

2. **final summative assessment during exam period covering the breadth of the course** total 40% (25% report and 15% presentation) – presentation due in week 13 and written report no more than 30 pages in double space (15 pages in single space) synthesizing the summaries.

All marks obtained for assessment items during the session are provisional. The final mark as published by the University following the Assessment Review Group meeting is the only official mark.

Use of Generative Artificial Intelligence (AI)

You can use generative AI software in this course to the extent specified in the assessment instructions. Any output of generative software within your assessment must be attributed with full referencing.

If the outputs of generative AI such as ChatGPT form part of your submission and is not appropriately attributed, it will be regarded as serious academic misconduct and subject to the standard penalties, which may include 00FL, suspension and exclusion.

* To cite: OpenAI (Year Accessed). ChatGPT. OpenAI. https://openai.com/models/chatgpt/

* Please note that the outputs from these tools are not always accurate, appropriate, nor properly referenced. You should ensure that you have moderated and critically evaluated the outputs from generative AI tools such as ChatGPT before submission.

Grading Basis

Standard

Requirements to pass course

Note that the assessment for the course has been designed so that an overall mark of 50% or greater indicates that students have unambiguously demonstrated satisfactory completion of each learning outcome. Therefore, students who receive less than 50% overall for the course will receive a fail grade.

Course Schedule

Attendance Requirements

Students are expected to attend all classes and assessments unless their absence has been approved by the course coordinator. Students who have missed assessments or a laboratory, or expect to miss such a requirement, must inform the course coordinator by email at the earliest

practicable date:

In typical circumstances of missed assessments, a formal application for Special Consideration via the prescribed University procedure may be appropriate. Alternative assessment can then be arranged. Otherwise, in the case of absence a mark of zero will be awarded for the assessment. Further information is available under 'assessments'.

General Schedule Information

There is one 2-hr class scheduled per week, and four 3-hr labs. You are expected to attend all scheduled classes and labs. In addition, you are expected to do up to 7 hours of preparation and post-class work per week outside of the scheduled class and lab time. The 3-hr lab class is normally for group discussion/presentations.

Lectures: Monday 1400-1600 in Room G32, Building 26.

Labs: Wednesday 1500-1650 in weeks 3,6,9 and12 in G23, Building 26.

Semester Planner

Week	Start Date	Monday	Tuesday	Wednesday	Thursday	Friday
1	15/07	Lec Topic 1				
2	22/07	Lec Topic 1				
3	29/07	Lec Topic 1		Lab Topic 1 Presentations		
4	5/08	Lec Topic 2				
5	12/08	Lec Topic 2	Friday Timetable			Miliary Training Day
6	19/08	Lec Topic 2		Lab Topic 2 Presentations		
Break	26/08					
Mid Semester Break						
Break	2/09					
7	9/09	Lec Topic 3				

8	16/09	Lec Topic 3	Military Training Day	
9	23/09	Lec Topic 3	Lab Topic 3 Presentations	
10	30/09	Lec Topic 4		
11	7/10	Labour Day	Military Training Day	Military Training Day
12	14/10	Lec Topic 4	Lab Topic 4 Presentation	
13	21/10		Final presentation	
Break	28/10	Study Recess		
Exams	2/11			

Course Resources

Prescribed Resources

N/A

Recommended Resources

N/A

Course Evaluation and Development

One of the key priorities in the 2025 Strategy for UNSW is a drive for academic excellence in education. One of the ways of determining how well UNSW is progressing towards this goal is by listening to our own students. Students will be asked to complete the myExperience survey towards the end of this course.

Students can also provide feedback during the semester via: direct contact with the lecturer; the "On-going Student Feedback" link in Moodle; Student-Staff Liaison Committee meetings in schools; and informal feedback conducted by staff. Student opinions really do make a difference. Refer to the Moodle site for this course to see how the feedback from previous students has contributed to the course development.

Important note: Students are reminded that any feedback provided should be constructive and professional and that they are bound by the Student Code of Conduct Policy.

Referencing

In this course, students are required to reference using in-text citations and a reference list, following the APA referencing style. Information about this referencing style is available on the Course Moodle site.

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Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Xiao Hua Wang		Building 26, Room G21	0411894137	I am usually available for consultation during normal working hours. Please email to make an appointment.	No	Yes