





first and then allied to the oceans, to the atmosphere, and to the role of both in the climate system.

## Course Aims

The aim of this course is to introduce mathematical models that describe the circulation of the ocean and atmosphere. Students will gain a basic understanding of the physical processes and forcing mechanisms in the ocean and atmosphere. After successfully completing this course students will be able to identify the relevant physical approximations and mathematical techniques needed to model a range of commonly occurring geophysical flows. Students will also gain an understanding of the limitations involved in the modelling process as applied to atmosphere and ocean dynamics.

## Assessment and Deadlines

Assessment		Week	Weighting %	Course Learning Outcome (CLO)
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## Late Submission of Assessment Tasks

A late penalty of 5% of the maximum mark for the task will be applied per day or part day any assessment task is submitted more than 1 hour late. (Where "late" in this context means after any extensions granted for Special Consideration or Equitable Learning Provisions.) For example, an assessment task that was awarded 75% would be given 65% if it was 1-2 days late. Any assessment task submitted after 5 days will not be accepted.

Note that the penalty does not apply to

- Assessment tasks worth less than 5% of the total course mark, e.g. weekly quizzes, weekly class participation, or weekly homework tasks.

- Examinations and examination-style class tests

- Resits/Fail Assessments

## **Course Learning Outcomes (CLO)**

CLO1 Ability to apply some key concepts of geophysical fluid dynamics to observed weather and climate phenomena in the atmosphere and ocean.

CLO2 Ability to interpret the predictions of simple mathematical models in terms of the corresponding geophysical phenomena.

CLO3 Ability to make simple mathematical models, and to apply relevant simplifying physical approximations, for a range of commonly occurring geophysical flows.

CLO4 Ability to explain the key roles of the atmosphere and ocean in the global climate system.

## **Course Schedule**

The course will include material taken from some of the following topics. This is should only serve

## **Computing lab**

The main computing laboratory is Room G012 of the Red Centre. You can get to this lab by entering the building through the main entrance to the School of Mathematics (on the Mezzanine



**Equitable Learning Services (ELS)**

For Dates on Final Term Exams and Supplementary Exams

<https://student.unsw.edu.au/exam-dates>

If you believe your application for Special Consideration has not been processed, you should email [specialconsideration@unsw.edu.au](mailto:specialconsideration@unsw.edu.au) immediately for advice.

## **Course Evaluation and Development (MyExperience)**

Student feedback is very important to continual course improvement. This is demonstrated within the School of Mathematics and Statistics by the implementation of the UNSW online student survey *myExperience*, which allows students to evaluate their learning experiences in an anonymous way. *myExperience* survey reports are produced for each survey. They are released to staff after all student assessment results are finalised and released to students. Course convenor will use the feedback to make ongoing improvements to the course.