

# COURSE DETAIL

## OCEANS, COASTS & CLIMATE CHANGE

**Country**

Australia

**Host Institution**

University of Sydney

**Program(s)**

University of Sydney, Summer at University of Sydney

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Environmental Studies

**UCEAP Course Number**

118

**UCEAP Course Suffix****UCEAP Official Title**

OCEANS, COASTS & CLIMATE CHANGE

**UCEAP Transcript Title**

OCEANS COASTS&CHNGE

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

## Course Description

This course introduces core concepts about how the formation of ocean basins and their influence on climate govern the development of coasts and continental margins. These concepts provide a framework for understanding the geographic variation of coasts, continental shelves and sediment accumulations in the deep ocean. Ocean-basin evolution is explained in terms of movements within the Earth's interior and how these movements determine the geometry of ocean basins, and their alpine counterparts, which interact with the global circulation of the ocean and atmosphere. This interaction plays a key role in marine sedimentation and controls the environmental conditions responsible for the development of coral reefs and other ecosystems. The course systematically outlines how these factors have played out to produce, by gradual change, the coasts we see today, as well as the less familiar deposits hidden beneath the sea and coastal lands. It outlines how knowledge of responses to climate change in the past allow us to predict environmental responses to accelerated climate change occurring now and in the future due to the industrial greenhouse effect, but places these responses into perspective against the geological record.

## Language(s) of Instruction

English

## Host Institution Course Number

GEOS2115

## Host Institution Course Title

OCEANS, COASTS & CLIMATE CHANGE

## Host Institution Course Details

[http://www.geosci.usyd.edu.au/units\\_of\\_study/us\\_geos2115.shtml](http://www.geosci.usyd.edu.au/units_of_study/us_geos2115.shtml)

## Host Institution Campus

Sydney

## Host Institution Faculty

<b>Host Institution Degree</b>
<b>Host Institution Department</b> Geosciences
<b>Course Last Reviewed</b> 2025-2026

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