

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

Host Institution Campus

Sydney

Host Institution Faculty

Host Institution Degree

Host Institution Department

Geosciences

Course Last Reviewed

2025-2026

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