

COURSE DETAIL

COASTAL ENVIRONMENTS AND PROCESSES

Country

Australia

Host Institution

University of Sydney

Program(s)

University of Sydney

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Environmental Studies Earth & Space Sciences

UCEAP Course Number

120

UCEAP Course Suffix**UCEAP Official Title**

COASTAL ENVIRONMENTS AND PROCESSES

UCEAP Transcript Title

COASTAL ENVIRONMENT

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course introduces a variety of coastal environments and the major processes which control the morphodynamic evolution of these systems. The course offers a unique opportunity of learning the full spectrum of marine sedimentary environments from siliciclastic, temperate, highly urbanized and impacted estuarine ecosystems to carbonate, tropical, pristine and undeveloped/protected coastal and continental margin environments. The course is divided in three sections: Section A covers the basic morphodynamics and processes impacting carbonate-dominated coastal and continental margin environments. The focus is on carbonate reefal and margin systems and their geologic and biologic responses to past, present and future environmental changes; Section B covers the basic morphodynamics of temperate and tropical coasts, including beach morphodynamics and basic knowledge on waves and currents; Section C consolidates all concepts learnt in the previous sections by applying them to numerical modelling. There is a compulsory weekend field trip to the NSW coast to study beach morphodynamics and fieldwork techniques. Depending on the year, there may be a voluntary field trip to a coral reef environment, for example, The University of Sydney One Tree Island Research Station.

Language(s) of Instruction

English

Host Institution Course Number

GEOS3009

Host Institution Course Title

COASTAL ENVIRONMENTS AND PROCESSES

Host Institution Course Details

Host Institution Campus

sydney

Host Institution Faculty

Host Institution Degree

Host Institution Department

Geosciences

Course Last Reviewed

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