

# 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 Campus**

sydney

## **Host Institution Faculty**

## **Host Institution Degree**

## **Host Institution Department**

Geosciences

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