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 introduce 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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