

COURSE DETAIL

MARINE SYSTEMS

Country

South Africa

Host Institution

University of Cape Town

Program(s)

University of Cape Town

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Environmental Studies Biological Sciences

UCEAP Course Number

144

UCEAP Course Suffix**UCEAP Official Title**

MARINE SYSTEMS

UCEAP Transcript Title

MARINE SYSTEMS

UCEAP Quarter Units

8.00

UCEAP Semester Units

5.30

Course Description

This advanced course covers the main ocean and atmosphere systems, with a particular emphasis on their biogeochemical functioning. This includes an introduction to the major marine biogeochemical cycles, seawater carbonate chemistry, phytoplankton-nutrient interactions and growth kinetics, surface ocean-lower atmosphere interactions, and an introduction to Earth system dynamics. The physical forcings and their biogeochemical and ecosystem responses are quantitatively illustrated for upwelling systems, oligotrophic systems, coastal systems around South Africa, and the Southern Ocean. Emphasis is placed on treating the systems in an integrative manner. Methods of data sampling and analysis, computation of biogeochemical pools, and rates and feedback are covered in the tutorials and practicals.

Language(s) of Instruction

English

Host Institution Course Number

SEA2005S

Host Institution Course Title

MARINE SYSTEMS

Host Institution Course Details

https://www.uct.ac.za/sites/default/files/content_migration/uct_ac_za/49/files/...

Host Institution Campus

University of Cape Town

Host Institution Faculty

Faculty of Science

Host Institution Degree

Host Institution Department

DEPARTMENT OF OCEANOGRAPHY

Course Last Reviewed

2022-2023

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