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 Campus
University of Cape Town

Host Institution Faculty
Faculty of Science

Host Institution Degree

Host Institution Department
DEPARTMENT OF OCEANOGRAPHY

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