

COURSE DETAIL

OCEANS AND CLIMATE

Country

Barbados

Host Institution

University of the West Indies

Program(s)

University of the West Indies

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Environmental Studies

UCEAP Course Number

105

UCEAP Course Suffix**UCEAP Official Title**

OCEANS AND CLIMATE

UCEAP Transcript Title

OCEANS & CLIMATE

UCEAP Quarter Units

8.00

UCEAP Semester Units

5.30

Course Description

This course examines the following topics: the climate system; radiation; the atmosphere; greenhouse effect; climate variability; the oceans; chemical composition of the oceans; ocean circulation; cryosphere, biosphere, geosphere, timescales, and feedbacks; physical interactions between the ocean and atmosphere; long-wave radiation; heat and moisture exchange; oceanic heat balance; Coriolis force; geostrophy; tidal forces and their influence; wave formation and characteristics; wind-driven circulations; the ocean gyres; coastal upwelling; monsoonal circulation; oceanic eddies; the thermohaline circulation; oceanic impacts; tropical cyclones; and finally, mesocyclones are studied.

Language(s) of Instruction

English

Host Institution Course Number

ERSC 1002

Host Institution Course Title

OCEANS AND CLIMATE

Host Institution Course Details

Host Institution Campus

UWI-Cave Hill

Host Institution Faculty

Host Institution Degree

Host Institution Department

Biological and Chemical Sciences

Course Last Reviewed

2024-2025

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