

## 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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