

## COURSE DETAIL

### PHYSICAL OCEANOGRAPHY

**Country**

Korea, South

**Host Institution**

Yonsei University

**Program(s)**

Yonsei University

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Earth & Space Sciences

**UCEAP Course Number**

102

**UCEAP Course Suffix****UCEAP Official Title**

PHYSICAL OCEANOGRAPHY

**UCEAP Transcript Title**

PHYSCL OCEANOGRPHY

**UCEAP Quarter Units**

4.50

**UCEAP Semester Units**

3.00

## Course Description

This course explores the structure of the ocean and the driving forces for the ocean circulation. It also includes the discussion about the dynamics working in the ocean and characteristics of Seven Seas. Topics include History of physical oceanography, Observation and data analysis, Mean states of the ocean(wind-driven circulation and thermohaline circulation), Dynamics(Advection, Transport, Budgets, Equation of motion, Geostrophy, Friction, Ekman layer, Potential vorticity, Sverdrup balance, western boundary current), Global ocean circulation, Equatorial circulation and ENSO, Pacific / Atlantic / Indian Oceans, Southern Ocean / Arctic, Waves and tides, Ocean mixing, and Ocean modeling.

### Language(s) of Instruction

English

### Host Institution Course Number

ATM3111

### Host Institution Course Title

PHYSICAL OCEANOGRAPHY

### Host Institution Campus

### Host Institution Faculty

### Host Institution Degree

### Host Institution Department

Atmospheric Sciences

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