

OCES 1001 – The Earth as a Blue Planet (3-credit)

Mode of Delivery – Blended Learning

This course will be delivered in the Blended Learning mode where students will view the lectures online and come to the Face-to-Face class to apply what they have learned online. The online lectures allow you to learn at your own pace, place and space and the face-to-face meetings allow you to discuss the concepts you learned with your peers. This requires you to work independently at home and come prepared to work collaboratively in-class.

Course Website: <http://canvas.ust.hk/>

- Due to the COVID-19 concern, all face-to-face sessions will be delivered on Zoom. Students **MUST TURN ON THE CAMERA** throughout the Zoom live sessions.
- For attendance taking, students should enter the Zoom live sessions **via Canvas**.

Zoom Live Sessions

The Zoom links will be provided in the Canvas site.

Course Description

The ocean is the largest life supporting habitat on Earth, and yet, it is less explored than the surface of the moon. This survey course introduces students to the fundamental, cross-disciplinary knowledge of our ocean from its formation, to the physics in circulation and climate modulation, to the chemistry and biology of the living systems within.

Intended Learning Outcomes

By the end of the course, students will be able to:

1. Describe different aspects of ocean science and identify their areas of interest from the ocean science curriculum (knowledge/content related);
2. Recall the basics of ocean processes and their importance to the functioning of our planet (knowledge/content related);
3. Describe the hydrology of Hong Kong and how it relates to the global ocean (knowledge/content related, academic skills/competencies);
4. Evaluate critically the physical, chemical and biological impacts of human activities on the ocean systems (knowledge/content related, academic skills/competencies);
5. Communicate relevant knowledge in oral and written formats (communication, team working).

Grading Policy (Letter Grades)

Assessment	Percentage	Content
1. Case Studies (online, via Zoom) [Group work - to be completed within Zoom live sessions]	35%	Complete case study worksheets through <u>online group</u> discussions.
2. Concept Map Exercise [Group work – to be conducted <u>outside class</u> time]	10%	Students need to coordinate this group work by themselves (i.e. done <u>outside class</u> time). Each group should submit <u>one</u> Concept Map that shows their interpretation of connecting all 7 module parts - Modules (1), (2a), (2b), (3a), (3b), (3c), and (4). More information will be given in the Zoom session.
3. Peer Rating (online, using iPeer) [Individual work - each student needs to evaluate his/her group members' performance in items 1 and 2 above.]	5%	Intra-group peer evaluation for group assignments <ul style="list-style-type: none"> • Case Studies • Concept Map Exercise <i>The Peer Rating aims to provide a chance for students to evaluate each other's contribution in the group work. Up to 5% from this category will be deducted for free-riders.</i> More information will be given in the Zoom session.
4. Final Examination (online)	50%	Based on online lectures (videos & powerpoints) and online quizzes (the self-tests) <ul style="list-style-type: none"> • Exam Trial-Run will be conducted in the Zoom live session • More information will be announced later

Case Studies (Total: 35%; 5% per case study)

Format	Details
<u>7 case studies</u> <ul style="list-style-type: none"> • Case Studies 1, (2a), (2b), (3a), (3b), (3c), and (4) <u>Reading material will be provided</u> <ul style="list-style-type: none"> • Group Discussion • Worksheet (group work) 	<u>7 worksheets</u> <ul style="list-style-type: none"> • To be submitted at the end of the corresponding session • Each group should submit <u>one</u> worksheet • <u>Absentees</u> will be given <u>zero</u> mark for the corresponding case study worksheet • Students who are <u>late for >5 mins</u> will be subject to a <u>deduction of at least half</u> of the case study group mark

Note: For attendance taking, students should enter the Zoom live sessions via Canvas.

Online Quizzes (x7): Self-Tests, NOT included in course assessment

There is one online quiz (10 MC questions) under each part – Quizzes (1), (2a), (2b), (3a), (3b), (3c), and (4). After going through the lecture videos and powerpoint of each part, students are encouraged to complete the quiz to check their understanding. Questions (if any) can be raised through Canvas's Discussion Room or during the Zoom live sessions.

Lecture	Zoom Live Session	Online Input
1	Course Introduction	Modules (1) & (2) available lecture videos, PPTs, Quiz (1) & Quiz (2)
2	[Practice] Case Study Group Discussion via Zoom Breakout Rooms	
3	<ul style="list-style-type: none"> What is a <i>Concept Map</i>? How to evaluate and report your group members' performance? 	Quiz (1)
4	Module (1): Physical Characteristics of the Ocean <ul style="list-style-type: none"> Q&A Case Study (1) – group discussion Worksheet (1) – group work 	Quiz (2a)
5	Module (2a): A Glimpse of Marine Life – Diversity of Life <ul style="list-style-type: none"> Q&A Case Study (2a) – group discussion Worksheet (2a) – group work 	Quiz (2b) Module (3) available lecture videos, PPTs, Quiz (3a), Quiz (3b) & Quiz (3c)
6	Module (2b): A Glimpse of Marine Life – How do They Obtain Food? <ul style="list-style-type: none"> Q&A Case Study (2b) – group discussion Worksheet (2b) – group work 	
7	<ul style="list-style-type: none"> Virtual Visit @ Coastal Marine Lab Mid-semester Review & Feedback 	Quiz (3a)
8	Module (3a): The Coastal, Intertidal and Subtidal <ul style="list-style-type: none"> Q&A Case Study (3a) – group discussion Worksheet (3a) – group work 	Quiz (3b) Module (4) available • lecture videos, PPT & Quiz (4)
9	Module (3b): The Coastal, Intertidal and Subtidal <ul style="list-style-type: none"> Q&A Case Study (3b) – group discussion Worksheet (3b) – group work 	Quiz (3c)
10	Module (3c): The Deep Sea <ul style="list-style-type: none"> Q&A Case Study (3c) – group discussion Worksheet (3c) – group work 	Quiz (4)
11	Module (4): Humans and the Sea <ul style="list-style-type: none"> Q&A Case Study (4) – group discussion Worksheet (4) – group work 	
12	Online Exam Trial-Run (MANDATORY)	