The University of Hong Kong
School of Biological Sciences

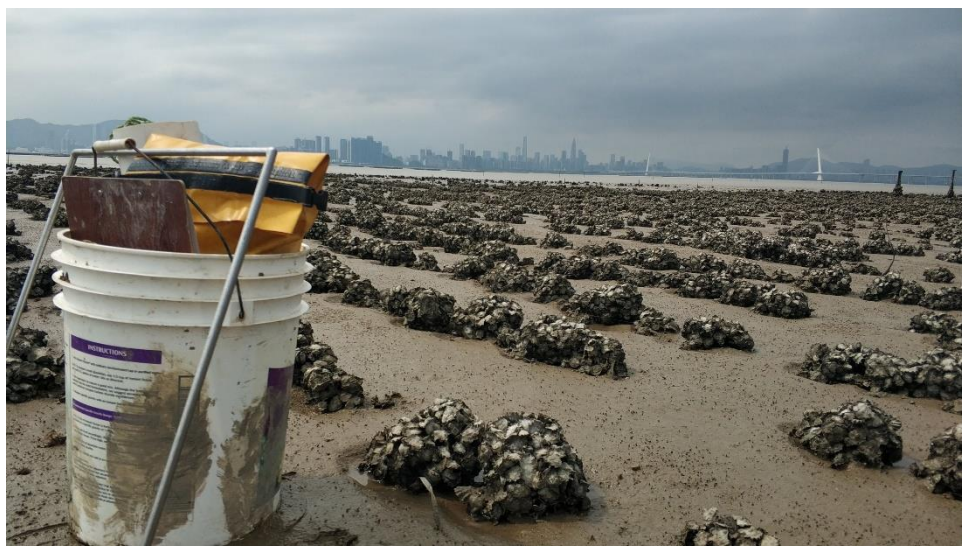
Qualifying Seminar

Biodiversity-Ecosystem Function Relationship in Oyster Reefs

Date: 30 Sep 2021 (Thu)

Time: 1600

Venue: 3N-01 + Zoom



About the speaker:

Khan Cheung is a second year MPhil student in the Marine Futures Lab. He has broad interest in a variety of research topics, and mainly focuses on eco-evolutionary dynamics using molecular biology approaches.

Abstract:

Tropical coastal waters are under a constant threat from nitrogen pollution. If not mitigated, nitrogen pollution can lead to a suite of undesirable outcomes, including harmful algal blooms and hypoxia, ultimately threatening ecosystem function, food safety and public health.

Oyster reef restoration has been proposed as an effective tool in mitigating coastal pollution. Oyster reefs are very efficient in removing nitrogen from the ecosystem, along with many other ecosystem functions. Yet, a mechanistic understanding of the bacteria-mediated denitrification processes in oyster reef sediment is limited. This study aims to identify the bacterial diversity in oyster reef sediments, and examine if there exists any correlation between the denitrification potential of the sediment bacterial community and the genetic diversity of the reef-forming oysters.