One Planet, One Ocean Course Syllabus

Module 1. One Planet – One Ocean
1.1 The Ocean MOOC
1.2 The Ocean: A finite resource
1.3 Concepts of Sustainability
1.4 Economic Models of Sustainability
1.5 Governing Global Commons
1.6 Values and Attitudes to the Ocean
1.7 From Science to Solutions

Module 2: Coasts
2.1 Coastal Systems
2.2 Influences from Land: Deltas under Pressure
2.3 Influences from the Ocean: Coastal Hazards
2.4 Threats from the Sea Bed
2.5 Coastal Ecosystems
2.6 Ecosystem and Nutrient Management
2.7 Coastal Solutions: Ecosystem-based Management
2.8 Future of our Coasts

Module 3: Marine Ecosystems
3.1 Dance of the plankton
3.2 Marine Ecosystem Change and Services
3.3 Valuing Ocean Assets
3.4 Resilience and Adaptation in the Ocean
3.5 Alien Species Migrations and Range Shifts
3.6 Ocean Plastic A) - Where is it?
3.7 Ocean Plastic B) - What to do about it?
3.8 Marine Spatial Planning

Module 4: Fisheries and Aquaculture
4.1 Marine Food Chains
4.2 Aquaculture and Mariculture
4.3 Fisheries Economics and Management
4.4 Sustainable Management of Fisheries
4.5 From Attitude to Action

Module 5: Marine Life and Minerals
5.1 Ocean Evolution

5.2 Evolution and Marine Diversity
5.3 Life in the Deep Sea
5.4 Non-Renewable Ocean Resources
5.5 Seafloor Resources: Energy and Minerals
5.6 Ocean Exploration and Sustainable Use of Marine Resources

Module 6: Ocean and Climate
6.1 Human influence on the Ocean
6.2 Changes in Ocean Circulation
6.3 Ocean Prediction
6.4 Ocean Heat Storage and Sea Level
6.5 The Ocean’s Biological Pump
6.6 Ocean Change: A Mix of Interacting Stressors
6.7 Climate Engineering
6.8 Sub-Seafloor Carbon Storage