## 2023 Marine Ecosystems (Fall) 海洋生態學

This is an introductory course on Marine Ecosystems. In the initial half weeks (weeks 1 to 9), we will use "Kaiser et al. (2011) *Marine Ecology, process, systems, and impacts*. Oxford University Press" as a textbook. In addition to the textbook, some published papers might be introduced depending on the lecturer. In the last half weeks (weeks 10 to 15), we will invite the experts in the field to introduce the latest studies. The last week (week 16) will be a half-day trip to a museum.

Students are expected to prepare for the lecture by reading the textbook and papers given by each lecturer in advance. There is no examination in this lecture course, and the final grade will be given based on attendance (50 points), assignment (30 points), and participation (20 points).

As for reading materials and assignments for each lecture, lecturers will provide or inform students at least one week before the lecture. If there is any question, please contact Ryuji Machida (ryujimachida@gmail.com).

	Wednesda	ay 14:00-17:00	Room 101, 1 F, Green House Building, BRCAS	
Date		Lecturer	Theme	
week 1	9/6	Ryuji Machida	Patterns	Patterns in the Marine Environments
week 2	9/13	Ryuji Machida	Processes	Primary production processes
week 3	9/20	Ryuji Machida	Processes	Secondary production processes
week 4	9/27	Tzu-Hao Lin	Systems	Estuaries
week 5	10/4	Tzu-Hao Lin	Systems	Rocky and Sandy Shores
week 6	10/11	Chien-Hsiang Lin	Systems	Polar Regions
week 7	10/18	Chien-Hsiang Lin	Systems	The Deep Sea
week 8	10/25	Chien-Hsiang Lin	Impacts	Fisheries
week 9	11/1	/	/	No class
week 10	11/8	Hui-Yu Wang	Expert lecture 1	Human impacts on fish populations
week 11	11/15	Benny Chen	Expert lecture 2	Coral symbiotic barnacles and host-usage
week 12	11/22	Tzu-Hao lin	Expert lecture 3	Marine acoustics
week 13	11/29	Chien-Hsiang Lin	Expert lecture 4	Marine conservation paleobiology
week 14	12/6	Ryuji Machida	Expert lecture 5	eDNA, metabarcoding and metatranscriptomics of marine metazoans
week 15	12/13	Allen Chen	Expert lecture 6	Coral reef
week 16	12/20	Chien-Hsiang Lin, Tzu-Hao Lin, Ryuji Machida	Taiwan Marine Ecosystem	A half day tour to the National Museum of Marine Science and Technology